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Based mainly on the assumption that enrollment rates through 1976-77 will continue the trend from 1956-57 to 1966-67, projections are determined for several key educational statistics, including enrollment for all levels from kindergarten through graduate study, number of high school graduates and college degrees, number of teachers and other professional staff, expenditures of educational institutions, and basic student charges for institutions of higher education. (JK)

Projections of Educational Statistics to 1976–77

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Highlights

If :	present trends continue, we can expect increases in:
	Fall enrollment in all regular public and private elementary and secondary day schools: From 49.6 million in 1966 to 52.1 million in 1976.
	Fall degree-credit enrollment in institutions of higher education: From 5.9 million in 1966 to 9.4 million in 1976.
	High school graduates from all public and private secondary day schools: From 2.7 million in 1966-67 to 3.6 million in 1976-77.
	Bachelor's and first-professional degrees granted by institutions of higher education: From 570,000 in 1966-67 to 961,000 in 1976-77.
	Fall full-time and part-time classroom teachers in all regular public and private elementary and secondary day schools: From 2.0 million in 1966 to 2.3 million in 1976.
	Full-time equivalent instructional staff for resident degree-credit courses in institutions of higher education: From 328,000 in 1966-67 to 471,000 in 1976-77.
	Total expenditures of all regular public and private elementary and secondary day schools: From \$31.9 billion in 1966-67 to \$42.4 billion in 1976-77 (in 1966-67 dollars).
	Total expenditures of institutions of higher education: From \$16.6 billion in 1966-67 to \$27.8 billion in 1976-77 (in 1966-67 dollars).

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Projections of Educational Statistics to 1976-77

(1967 Edition)

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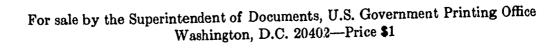
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Foreword

This publication supplies projections of statistics on elementary and secondary schools and institutions of higher education. The statistics include enrollment, graduates, teachers, and expenditures. These projections supersede the ones shown in *Projections of Educational Statistics to 1975-76* (OE-10030), 1966. They are based mainly on 1956-57 to 1966-67 Office of Education data and they cover the period 1967-68 to 1976-77 for the United States. Many of these data are available by State for 1966-67 in the Office of Education publication, *Digest of Educational Statistics*, 1967 edition.

The projections shown here are based mainly on the assumption that the 1956-57 to 1966-67 trend in enrollment rates will continue through 1976-77. The overall trend for an increasing percentage of persons to enroll in school or college is then reflected in the totals of graduates, teachers, and expenditures. Further information about projected changes and the assumptions on which these are based are shown in the main body of this report. Details of the methodology used in making these projections are given in the appendix.

A. M. Mood

Assistant Commissioner for

Educational Statistics

F. C. Nassetta Acting Director, Division of Data Analysis and Dissemination

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Chapter I

Enrollment

Velma S. Southard and Martin M. Frankel

Total fall enrollment

Total fall enrollment increased from 40 million in 1956 to 56 million in 1966 and is expected to be 62 million in 1976. This includes enrollment in all regular public and nonpublic elementary and secondary schools and enrollment in all degree-credit and nondegree-credit courses in occupational or general studies programs in institutions of higher education. It excludes enrollment in adult education courses of regular length and less than regular length in institutions of higher education, enrollment in correspondence, television and radio courses given by institutions of higher education, enrollment in private subcollegiate vocational schools, and enrollment in elementary and secondary grades in the following schools: Residential schools for exceptional children, Federal ... hools for Indians, schools on Federal installations, and subcollegiate departments of institutions of higher education.

Projected total fall enrollments are shown in table 1. The projections are based on the following assumptions: (1) The percentage of school-age persons enrolling in school and the retention rates of those already in school will continue the 1956-66 trend; and (2) the current fertility rate, upon which the projections of school-age population are based, will continue without major change to 1976. This population base differs from the base used previously which assumed a continuation of the average 1964 and 1965 fertility rates. Office of Education estimates of the October 1 school-age population which make use of these bases are shown in appendix tables E and F. A projection of elementary and secondary enrollments using the same base as last year is shown in appendix table G. The higher education projections are unaffected by the change in population base.

Fall enrollment in regular public elementary and secondary schools

Fall enrollment in regular public elementary and secondary schools (table 2) increased from 31.7 million in 1956 to 43.1 million in 1966, and is expected to be 45.7 million in 1976. This enrollment excludes an estimated total of 0.3 million enrolled in schools such as residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations.

Increases in the next decade will be at the high school level because all of the children who will be progressing through high school in those years were born in the high-birth-rate years between 1946 and 1951, and because enrollment rates of persons of high school age are continuing to increase. Enrollment in grades 9 through 12 rose from 7.2 million in 1956 to 11.9 million in 1966 and is expected to be 15.2 million in 1976.

Enrollment in grades kindergarten through 8 is expected to increase to 1969 and then decline as the smaller birth conorts of the 1960's make up a larger and larger proportion of the numbers attending. If current fertility rates hold, however, the downward trend will be reversed by the end of the 1970's. The proportion of children of elementary school age who enroll in school is arready so high (about 99 percent, if 5-year-olds are excluded) that any increase in enrollment rates for this age group will be minimal. Enrollment in kindergarten through grade 8 increased from 24.5 million in 1956 to 31.2 million in 1966, and is expected to be 30.5 million in 1976.

Enrollment in schools organized as high (secondary) schools increased from 9.5 million in 1956 to 15.9 million in 1966, and is expected to be 20.6 million in 1976. Enrollment in these schools is larger than the enrollment in grades 9 through 12 previously given because it includes some of the enrollment in grades 7 and 8. This also accounts for the fact that enrollment in schools organized as elementary schools is smaller than that in grades kindergarten through 8. The enrollment loss from grades 7 and 8 to schools organized as secondary schools may be even larger than the reported figures show because some school areas find it difficult to report by organizational level. Enrollment in elementary schools increased from 22.3 million in 1956 to 27.1 million in 1956 and is expected to be 25.1 million in 1976.

Projections of enrollment by grade group and school organization are shown in tables 2 and 3. The projection by grade group was derived by applying enrollment rates to 5-, 6-, and 7-year-olds and retention rates to grades 2 through 11. The projection by organizational level was derived by assuming that the percentage of seventh- and eighth-grade enrollment organized as secondary school enrollment will continue to increase as it has in the past.

Fall enrollment in regular nonpublic elementary and secondary schools

Fall enrollment in regular nonpublic elementary and secondary schools, kindergarten through grade 12, increased from an estimated 4.9 million in 1956 to 6.5 million in 1966, and is expected to be 6.4 million in 1976. These figures exclude enrollment in residential schools for exceptional children, subcollegiate departments of institutions of higher education, and private vocational schools.

As in the public schools, increased enrollment is expected only at the secondary school level. Enrollment in grades 9 through 12 increased from 0.9 million in 1956 to 1.3 million in 1966 and is expected to be 1.5 million in 1976. Enrollment in kindergarten through grade 8 increased from 4.0 million in 1956 to 5.2 million in 1966 and is expected to drop to 4.9 million in 1976. The drop in enrollment may be attributed partly to the school-age-population decrease and partly to the effort of some nonpublic elementary schools to limit class size in order to lower pupil-teacher ratios.

Almost all nonpublic school enrollment follows the traditional pattern of organization by level. That is, almost all nonpublic seventh and eighth graders are in elementary schools. Therefore, the nonpublic school figures shown in this publication for grades K-8 and 9-12 are the same as the ones shown for enrollment by organizational level.

Projected enrollment in nonpublic elementary and secondary schools is shown in tables 2 and 3, along with public school enrollment. It is based on the assumption that current trends in nonpublic school enrollment will continue with a tendency to level off toward the end of the projection period.

Total opening fall enrollment in institutions of higher education

Fall enrollment in 4-year and 2-year institutions of higher education (table 4) includes resident and extension, full-time and part-time students taking work creditable toward a bachelor's or higher degree; and also resident and extension, full-time and part-time students in occupational or general studies programs not chiefly creditable toward a bachelor's degree. It excludes students in adult education courses, correspondence, television, or radio courses, and students in subcollegiate departments of higher educational institutions. Fall enrollment in higher educational institutions (table 4) increased from an estimated 3.1 million in 1956 to 6.4 million in 1966 and is expected to be over 10 million in 1976, of which 710,000 or 7 percent are expected to be in occupational or general studies programs.

Of the 9.4 million students expected in 1976 who will be taking work toward a bachelor's or higher degree, 1.1 million or 12 percent are expected to be seeking degrees beyond the bachelor's level. Of the remaining 8.3 million who are seeking undergraduate degrees, fewer than one-fourth are expected to be first-time students.

Included among the projected higher education enrollments shown in this publication are an estimated annual total of 67,000 veterans who have been discharged during the past 10 years or are expected to be discharged and who, it is assumed, would not have entered college without the aid offered by the Veterans' Readjustment Benefits Act of 1966. Therefore, they have been added to the projected numbers which were obtained through application of attendance rates to the college-age population. Because these entering veterans represent all levels of college attainment from first-time in any college to the graduate level, they have been distributed in tables 4 through 16 in the same proportions as the projected enrollments.

First-time opening fall enrollment in degree-credit courses

First-time opening fall enrollment in degree-credit courses increased from 0.7 million in 1976 to an estimated 1.4 million in 1966 and is expected to be 2.0 million in 1976. Projected first-time degree-credit enrollment in all institutions of higher education is shown in table 5. It is based on the assumption that first-time enrollment as a percentage of the population averaging 18 years of age will continue the 1956-65 trend. This percentage increased from 32 in 1956 to 40 in 1965 and is expected to be 49 in 1976. The large increases in first-time enrollment in 1964 and 1965 are the result of the large number of births immediately following World War II. There was a subsequent one-year drop of 300,000 births and then a gradual increase through 1957, followed by a leveling of period and small yearly decreases from 1962 through 1966. As a result, the 1966 estimate of first-time enrollment shows a small decrease despite the upward trend in enrollment rates, and the years following 1966 are expected to show only moderate increases. In addition to the population and attendance rate increases between 1966 and 1976, the



Veterans' Readjustment Benefits Act of 1966 is expected to increase first-time enrollment by 17,000 each year.

The distribution of first-time enrollment by sex and by control of the institution attended is shown in table 5 also. Women increased their percentage of first-time enrollment from 38 percent in 1956 to 42 percent in 1965 and are expected to reach 46 percent of all first-time degree-credit enrollment by 1976. First-time degree-credit enrollment in public institutions increased from 60 percent in 1956 to 69 percent in 1965 and is expected to be 75 percent in 1976.

First-time degree-credit opening fall enrollment in 4-year institutions is shown in table 6, and that in 2-year institutions is shown in table 7. First-time enrollment in 2-year institutions represented 23 percent of all first-time degree-credit enrollment in 1956, 28 percent in 1965, and is expected to be 32 percent by 1976.

The enrollment of men accounted for 62 percent of first-time degree-credit enrollment in 2-year institutions in 1956, 60 percent in 1965, and 58 percent in 1976. Most students enrolled in 2-year colleges for the first time attend publicly controlled institutions. The percentage in public institutions rose from 84 percent in 1956 to 87 percent in 1965, and is expected to reach 88 percent in 1976.

Total opening fall enrollment in degree-credit courses

Total opening fall enrollment in courses creditable toward a bachelor's or higher degree in all institutions of higher education increased from 2.9 million in 1956 to an estimated 5.9 million in 1966 and is expected to climb to 9.4 million by 1976. These figures include all resident and extension, full-time and part-time, graduate and undergraduate enrollment in degree-credit courses in 4-year institutions and in 2-year institutions. They include first-time as well as more advanced students.

Projected total opening fall degree-credit enrollment in all institutions of higher education is shown in table 8. The projections were made separately for men and women by type and by control of the institution attended and by the full-time or part-time attendance of the student. They are based on the assumption that the percentage of college-age people enrolled in college in each of the above enrollment categories will continue to increase from 1967 to 1976 as it did from 1956 to 1966. Further details of the methodology are given under the entries for tables 8 to 10 in appendix table A.

In addition to the number of enrollments between 1967 and 1976 obtained under the assumption mentioned above, the Veterans' Readjustment Benefits Act of 1966 is expected to increase enrollment in degree-credit courses by 66,000 each year.

Table 8 also gives the distribution of degree-credit students in all institutions of higher education by sex, by attendance status, and by control of the institution attended. As shown by this distribution the proportion of women enrolled has increased in the past decade from 35 percent in 1956 to 39 percent in 1965. It is expected to be 43 percent by 1976. The distribution also shows that about 71 percent of all opening fall degree-credit students attend college full time. There is, however, considerable variation in the 1965 percentages of full-time attendance among the different categories of students. The percentages for the different categories of students are given in the methodology for tables 8, 12, 14, and 15 in appendix table A. The 1965 percentages are expected to continue with only minor changes through 1976. According to the distribution shown in table 8, public institutions drew 57 percent of total enrollment in 1956 and 66 percent in 1965. The enrollment in public institutions was 1.7 million in 1956 and an estimated 4.0 million in 1966. This contrasted with an enrollment in private institutions of 1.3 million in 1956 and an estimated 2.0 million in 1966. Projected enrollment for 1976 is 6.7 million in public institutions and 2.6 million in private institutions.

Total degree-credit opening fall enrollment in 4-year institutions is shown in table 9. Since 85 percent of all degree-credit enrollment is in 4-year institutions, the enrollment patterns in these institutions resemble closely those of all institutions.

Total degree-credit opening fall enrollment in 2-year institutions is shown in table 10. Two-year institutions represented 12 percent of total degree-credit enrollment in 1956, and 15 percent in 1965. Total degree-credit undergraduate enrollment in 2-year institutions rose from 0.3 million in 1956 to an estimated 1.0 million in 1966 and is projected as 1.7 million in 1976. The pattern of enrollment in these institutions differed considerably from that of 4-year institutions. Men represented 62 percent of degree-credit enrollment in 1905; full-time students, 59 percent; and public institutions, 88 percent. Corresponding percentages for 4-year institutions in 1965 were 61 for men, 73 for full-time students, and 62 for public institutions.

Estimated opening fall enrollment by level and type of institution

Resident and extension opening fall degree-credit enrollment is not reported by level. Therefore, the graduate and undergraduate levels had to be estimated from information provided by other studies in the Office of Education. The estimates of resident graduate enrollment from 1956 through 1966 (table 11) were based on theoretical percentages derived from the projection equations. The equations



were based on resident graduate enrollment as a percentage of total resident and extension enrollment as observed over a period of years, and computed separately for each sex and control category in 4-year institutions (see additional methodology details in appendix table A under entry for table 11 with explanatory footnote 20). The Office of Education studies from which the basic data were obtained were the biennial comprehensive surveys of enrollments in higher education for the first term 1955 through 1961 and the survey of migration of college students, 1963. Percentages derived from the resulting equations were applied to corresponding categories of opening fall resident and extension degree-credit enrollment to estimate resident graduate enrollment.

Estimated resident graduate opening fall enrollment increased from 0.3 million in 1956 to 0.6 million in 1966 and is expected to reach 1.1 million by 1976. Resident graduate enrollment is the fastest growing component of total degree-credit enrollment. Estimated graduate enrollment increased 132 percent between 1956 and 1966, while estimated undergraduate and first-professional enrollment increased 88 percent in the same period. Estimates and projections of resident graduate enrollment and resident and extension undergraduate and first-professional enrollment, as components of total opening fall degree-credit enrollment in 4-year and 2-year institutions, are shown in table 11.

Because the comprehensive surveys obtained data on the number of resident graduate enrollments but not on the number of extension graduate enrollments, extension graduate enrollments are included with resident and extension undergraduate and first-professional enrollments. The number of extension graduate enrollments is believed to be quite small, however. The known components comprising resident and extension, undergraduate and first-professional enrollment in 4-year institutions, according to the 1963 study of migration of college students, are: Resident undergraduate, 87.9 percent; resident first-professional, 4.4 percent; and extension, including graduate extension, 7.7 percent.

Estimated resident and extension undergraduate and first-professional opening fail enrollment in all institutions rose from 2.7 million in 1956 to 5.3 million in 1966 and is expected to be 3.3 million in 1976. Over 80 percent of this enrollment was in 4-year institutions in 1965.

Estimated resident graduate opening fall enrollment

Projected resident graduate opening fall enrollment and the distribution of this enrollment by sex, by attendance status, and by control of the institution attended is shown in table 12. The projections by sex and by control of institution are based on the assumption that the proportion of the total degree-credit enrollment at the graduate level within each sex and control group will continue the 1955-63 trend to 1976. The projection by attendance status is based on the assumption that in each sex and control group, the 1965 ratio of estimated full-time graduate enrollment to total graduate enrollment will remain constant to 1976. Further details of the method used in making the projections are given in the footnotes to tables 12 and 13, and in appendix table A. The projection includes in each year an estimated 7,000 veterans taking graduate work in addition to the veterans enrolled in 1965, and to the veterans who would have enrolled in graduate work through means other than the aid provided by the Veterans' Readjustment Benefits Act of 1966.

The distribution of graduate enrollment by sex shows a slightly greater increase in graduate enrollment of women than in that of men. Women represented 28 percent of all graduate enrollment in 1956, 39 percent in 1965, and a projected 32 percent in 1976. A greater percentage of graduate enrollment was full time and a greater percentage was in public institutions in 1965 than in 1956. Fu'l-t me enrollment was 39 percent of all graduate enrollment in 1956 and 44 percent in 1965. It is expected to remain at or near 44 percent in 1976. Public institutions drew 49 percent of all graduate enrollment in 1956, and are expected to have 69 percent in 1976.

Estimated resident and extension undergraduate and first-professional opening fall eprollment

Projected undergraduate and first-professional opening fall enrollment together with the distribution of this enrollment by sex, by attendance status, and by control of the institution attended is shown in table 13. The projections by sex and by control of institution are based on the assumption that within each sex and control category the proportion of the total enrollment at the undergraduate and first-professional level will follow the 1955-63 trend to 1976. The projection of undergraduate and first-professional enrollment by attendance status is based on the assumption that the 1965 ratio of estimated full-time undergraduate and first-professional enrollment to total undergraduate and first-professional enrollment in each sex and control group will remain constant to 1976. The projections include in each year an estimated 59,900 veterans, enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966.

The distribution of undergraduate and first-professional students by sex, by attendance status, and by control of the institution attended differed greatly from that of resident graduate students. In 1965,

men accounted for 60 percent of the undergraduate and first-professional students, and 70 percent of the resident graduate students. Seventy-four percent of undergraduate and first-professional students were full-time students contrasted with 44 percent of resident graduate students. Public institutions drew 66 percent of undergraduate and first-professional students and 60 percent of resident graduate students.

Undergraduate and first-professional enrollment in 4-year institutions is shown in table 14. In 1965, 83 percent of all undergraduate and first-professional enrollment was in 4-year institutions. Undergraduate enrollment in 2-year institutions is the same as total enrollment in these institutions. This is shown in table 7 and discussed with total enrollment in 4- and 2-year institutions.

Estimated opening fall enrollment in nondegree-credit courses

Opening fall enrollment in nondegree-credit courses in occupational or general studies programs (excluding adult education) rose from an estimated 168,000 in 1956 to an estimated 443,000 in 1966 and is expected to be 710,000 in 1976. Forty percent of this enrollment is estimated to be full time for all years 1956 to 1976. Eighty-seven percent was reported in publicly controlled institutions in 1965 and this percentage is expected to rise to 90 percent in 1976. In 1956, 5.4 percent of all enrollment in institutions of higher education was estimated to be in nondegree-credit courses in occupational or general studies programs (excluding adult education). In 1965 this percentage was 6.7 and in 1976 is expected to be 7.0.

Projected total nondegree-credit opening fall enrollment and the distribution of this enrollment by attendance status of the student and by control of the institution attended is shown in table 15. The projection of total nondegree-credit enrollment is based on the assumption that within each institutional control group nondegree-credit enrollment will increase at the same rate as degree-credit enrollment. The projection by attendance status is based on the assumption that the percentage attending full time reported in the 1964 sample survey of full-time equivalent enrollments will remain constant to 1976 at 40 percent of total full-time and part-time enrollment.

Estimated opening fall full-time equivalent enrollment in degree-credit and nondegree-credit courses

Estimated opening fall full-time equivalent enrollment in degree-credit and nondegree-credit courses increased from 2.4 million in 1956 to 5.1 million in 1966, and is expected to be 7.9 million in 1976. In 1966, 67 percent of this enrollment was in public institutions, and 72 percent is expected to be in public institutions in 1976.

Estimated full-time equivalent enrollment in degree-credit courses increased from 2.3 million in 1956 to 4.8 million in 1966 and to a projected 7.5 million in 1976. Estimated full-time equivalent enrollment in nondegree-credit courses increased from 96,000 in 1956 to 252,000 in 1966 and is expected to be 404,000 in 1976. The estimated increase from 1956 to 1966 of 162 percent in nondegree-credit full-time equivalent enrollment contrasts with an estimated increase in degree-credit full-time equivalent enrollment of 108 percent.

Projections of degree-credit and nondegree-credit opening fall full-time equivalent enrollment by control of institution are shown in table 16. These projections are based on the assumption that the full-time equivalents of part-time enrollment reported in the 1964 sample survey of full-time equivalent enrollments² will remain constant to 1976. These full-time equivalents were 33 percent for part-time degree-credit enrollment and 28 percent for part-time nondegree-credit enrollment.



Department of Health, Education, and Welfare, Office of Education, unpublished data from 1964 full-time equivalent enrollments and credit hours sample survey.

³ Ibid.

1976 1971 Figure 1.—Fall enrollment in grades K-12 of regular day schools: United States, 1856-1976 (Data from table 2) 1966 1961 (Millions of students) 1956 0 10 -5 20 -30-35 -50 -45-40 + 55 — 25 15



The state of the s Figure 2.—Total opening fall degree-credit enrollment in all institutions of higher education: United States, 1956 to 1976 (Data from table 8) (Millions of students) Ŋ თ

ERIC Full Taxt Provided by ERIC

Table 1.—Fall enrollment in educational institutions: United States, 1956 to 1976¹
[In thousands]

			Institutions of higher education				Regular elementary and secondary day schools ²				
Year (fall)	Total enrollment _			Degree credit		Nondegree credit		Grades K-8		Grades 9-12	
	Total	Public	Non- public	Public	Non- public	Public	Non- public	Public (9)	Non- public (10)	Public (11)	Non- publi (12)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				
956	20 715	33,511	6 204	1,666	1,262	126	42	24,541	4,000	7,178	90
		34,847	•	1,763	1,285	133	43	25,230	4,200	7,721	90
957 958		36,118	•	1,894	1,343	143	44	26,004	4,400	8,077	1,00
959		37,315	•	1,984	1,393	149	45	26,911	4,600	8,271	1,00
960		38,541	•	2,116	1,467	144	45	27,692	4,800	8,589	1,10
961	•	39,934	•	2,329	1,532	141	!6	28,695	4,900	9,69	1,10
962	-	41,499	,	2,574	1,601	176	50	28,637	5,100	10,112	1,20
963	-	43,252	•	2,848	1,646	217	54	29,304	5,200	10 883	1,3
964	-	44,884	•	3,180	1,771	288	42	30,025	5,360	11,391	1,3
965		46,142	•	3,624	1,902	345	49	30,563	5,300	11,610	1,30
966	-	47,405		3,959	1,988	391	5 3	31,157	5,200	11,898	1,3
				P	ROJEC	TED					
1967	57 571	48,781	8,790	4,366	2,134	415	56	31,700	5,200	12,300	1,4
1968	-	49,823	8,881	4,679	2,223	444	58	32,000	5,200	12,700	1,4
1969	-	50,569	8,784	4,812	2,226	457	58	32,200	5,100	13,100	1,4
1970		51,104	8,828	5,027	2,269	477	59	32,100	5,000	13,500	1,5
1971		51,597	8,893	5,294	2,332	503	61	31,800	5,000	14,000	1,5
1972	•	51,934	8,863	5,602	2,400	532	63	31,500	4,900	14,300	1,5
1973	-	52,266	8,939	5,905	2,474	561	65	31,200	4,900	14,600	1,8
1974	-	52,490	9,006	6,201	2,540	589	66	30,900	4,900	14,800	1,
1975	•	52,805	9,067	6,489	2,599	616	68	30,600	4,900	15,100	1,8
1976		•	9,118	6,749	2,649	641	69	30,500	4,900	15,200	1,

¹ SOURCES and method: For sources of data and method of making projections, see footnotes on tables 2, 4, and 14, and methodology in appendix table A.

education, Federal schools for Indians, and schools on Federal installations.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



² Does not include residential schools for exceptional children, subcollegiate departments of institutions of higher

TABLE 2.—Fall enrollment in grades K-8 and 9-12 of regular day schools, by control: United States, 1956-1976¹²

SERIES C POPULATION PROJECTION

[In thousands]

	To	Total public and nonpublic			Public			Nonpublic (estimated)		
Year (fall)	K-12	K-8	9-12	K-12	K-8	9-12 (esti-	K-12	K-8	9-12	
(1)	(2)	(3)	(4)	(5)	mated) (d)	mated*) (7)	(8)	(9)	(10)	
1956	_ 36,619	28,541	8,078	31,719	24,541	7,178	4,900	4,000	900	
1957		29,430	8,621	32,951	25,230	7,721	5,100	4,200	900	
1958	39,481	30,404	9,077	34,081	26,004	8,077	5,400	4,400	1,000	
1959	40,782	31,511	9,271	35,182	26,911	8,271	5,600	4,600	1,000	
1960	_ 42,181	32,492	9,689	36,281	27,692	8,589	5,900	4,800	1,100	
1961	43,464	32,995	10,469	37,464	28,095	9,369	6,000	4,900	1,100	
1962	_ 45,049	33,737	11,312	38,749	28,637	10,112	6,300	5,100	1,20	
1963	•	34,504	12,183	40,187	29,304	10,883	6,500	5,200	1,30	
1964	•	35,325	12,691	41,416	30,025	11,391	6,600	5,300	1,30	
1965	•	35,863	12,910	42,173	30,563	11,610	6,600	5,300	1,300	
1966 4		36,357	13,198	43,055	31,157	11,898	6,500	5,200	1,300	
-			PRO	JECIEI) [
1967	50,500	36,900	13,700	43,900	31,700	12,300	6,600	5,200	1,400	
1968	51,300	37,200	14,100	44,700	32,000	12,700	6,600	5,200	1,400	
1969	•	37,300	14,500	45,300	32,200	13,100	6,500	5,100	1,40	
1970	•	37,100	15,000	45,700	32,100	13,500	6,500	5,000	1,50	
1971	•	36,800	15,500	45,800	31,800	14,000	6,500	5,000	1,50	
1972	•	36,400	15,800	45,800	31,500	14,300	6,400	4,900	1,50	
1973	•	36,100	16,100	45,800	31,200	14,600	6,400	4,900	1,50	
1974		35,800	16,300	45,700	30,900	14,800	6,400	4,900	1,50	
1975		35,500	16,600	45,700	30,600	15,100	6,400	4,900	1,50	

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1966; (2) "Enrollment, Teachers, and Schoolhousing," 1955 through 1963; (3) "Statistics of State School Systems," biennially, 1957-58 through 1961-62; (4) "Statistics of State School Systems, Biennial Survey of Education in the United States," ch. 2, 1954-56; (5) "Nonpublic School Enrollment in Grades 9-12, Fall 1964, and Graduates, 1963-64"; and (6) "Statistics of Nonpublic Elementary Schools, 1961-62.

1976______52,100 35,400 16,700 45,700 30,500 15,200

The population projections as of October 1, on which the enrollment projections are based (appendix table E), are consistent with Series C population projections in U.S. Department of Commerce, Bureau of the Census, "Current Population Reports," Series P-25, No. 359, February 20, 1967. The Series C population projection assumes that the calendar-year fertility rate of 1966 will prevail throughout the projection period.

For enrollment projections based on population projections. Series B, see appendix table G.

² Does not include residential schools for exceptional children, subcollegiate departments of institutions of higher

education, Federal schools for Indians, and schools on Federal installations.

4,900

1,500

³ Fali enrollment in public schools not reported by grade prior to 1962; grade breakdown for years 1956 through 1961 estimated from school year enrollment.

4 Preliminary data.

The projection of regular fall enrollment in day schools is based on these assumptions: (1) Enrollment rates of the 5-, 6-, and 7-year-old population in public school grades kindergarten, 1, and 2 will follow the 1956-66 trends; (2) the retention rate of public school grade 7 to 6 will remain constant at 103 percent through 1976; (3) the retention rate of public school grade 9 to 8 will remain constant at 104 percent through 1976; (4) the retention rate of all other public school grades will follow the 1956-66 trends with the restriction that they cannot exceed 100 percent; (5) enrollment in grades K-8 in nonpublic schools will decrease to the year 1972 and then remain constant through 1976; and (6) enrollment in grades 9-12 in nonpublic schools will increase to the year 1970 and then remain constant through 1976.

For further methodological details, see appendix table A. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



Table 3.—Fall enrollment, by organizational level of school and by control: United States, 1956 to 1976¹²

SERIES C POPULATION PROJECTION

[In thousands]

	T	Total public and nonpublic			Public			Nonpublic (estimated)		
Year (fall)		Elemen- tary		K-12	Elemen- tary	Second-	K-12	Elemen- tary	Second- ary	
(1)	(2)	(3)	ary (4)	(5)	(6)	a ry (7)	(8)	(9)	(10)	
1956	36,619	26,217	10,402	31,719	22,217	9,502	4,900	4,000	900	
1957		27,060	10,991	32,951	22,860	10,091	5,100	4,200	900	
1958	39,481	27,815	11,666	34,081	23,415	10,666	5,400	4,400	1,00	
19 5 9	40,700	28,506	12,276	35,182	23,906	11,276	5,600	4,600	1,000	
1960	42,181	29,150	13,031	36,281	24,350	11,931	5,900	4,800	1,10	
1961	43,464	29,503	13,961	37,464	24,603	12,861	6,000	4,900	1,100	
1962	45,049	30,364	14,685	38,749	25,264	13,485	6,300	5,100	1,200	
1963	46,687	30,975	15,712	40,187	25,775	14,412	6,500	5,200	1,30	
1964	48,016	31,521	16,495	41,416	26,221	15,195	6,600	5,300	1,300	
1965	48,773	31,970	16,804	42,173	26,670	15,504	6,600	5,300	1,300	
1966 3	49,555	32,327	17,228	43,055	27,127	15,928	6,500	5,200	1,300	
			PRO	JECTEI) 4					
1967	50,500	32,600	17,900	43,900	27,400	16,500	6,600	5,200	1,400	
1968	51,300	32,800	18,600	44,700	27,600	17,200	6,600	5,200	1,400	
1969	51,800	32, 300	19,200	45,300	27,500	17,800	6,500	5,100	1,400	
1970	52,200	32,300	19,800	45,700	27,300	18,300	6,500	5,000	1,500	
1971	52,300	31,900	20,400	45,800	26,900	18,900	6,500	5,000	1,500	
1972	52,200	31,300	20,900	45,800	26,400	19,400	6,400	4,900	1,500	
.973	52,200	30,800	21, 370	45,800	25,900	19,900	6,400	4,900	1,500	
1974	52,100	30,400	21, ivu	45,700	25,500	20,200	6,400	4,900	1,500	
1975	52,100	30,100	21,900	45,700	25,200	20,400	6,400	4,900	1,500	
1976	52,100	30,000	22,100	45,700	25,100	20,600	6,400	4,900	1,500	

¹ SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education, publications. (1) "Statistics of Public Schools," fall 1964 through 1966; (2) "Enrollment, Teachers, and Schoolhousing," 1955 through 1963; (3) "Statistics of State School Systems," biennially, 1957-58 through 1961-62; (4) "Statistics of State School Systems, Biennial Survey of Education in the United States," ch. 2, 1954-56, (5) "Nonpublic School Enrollment in Grades 9-12, Fall 1964, and Graduates, 1963-64"; and (6) "Statistics of Nonpublic Elementary Schools, 1961-62."

The population projections as of October 1, on which the enrollment projections are based (appendix table E), are consistent with Series C population projections in U.S. Department of Commerce, Bureau of the Census, "Current Population Reports," Series P-25, No. 359, February 20, 1967. The Series C population projection assumes that the calendar-year fertility rate of 1966 will prevail throughout the projection period.

² Does not include residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations.

Preliminary data.

4 The projection of total regular fall enrollment in public schools by organizational level of school is based on the assumption that the percentage of enrollment in grades 7 and 8 that will be organized as elementary and as secondary enrollment will follow the 1956-66 trend. The projection of regular fall enrollment in nonpublic schools by organizational level is based on the assumption that substantially all nonpublic enrollment in grades 7 and 8 will continue as elementary enrollment.

For methodological details, see appendix table A.

NOTE.—Data 4.7 * 50 States and the District of Columbia for all year. Because of rounding, detail may not add to totals.



Table 4.—Total opening fall resident and extension enrollment in all institutions of higher education, by degree status and level: United States, 1956 to 1976¹

[In thousands]

			1	Degree-credit			Nondegree- credit
	Total resident and extension degree-credit and Total resident			Estim extens and	Resident and extension undergraduate		
Year fall ²	nondegree- credit	and extension degree-credit	resident graduate;	Total	lst-time	Other	in vocations or general atudies
(1)	(2)	(3)	(4)	(5)	(6)	(7)	programs ⁵ (8)
956	3,095	2,927	271	2,656	718	1,938	168
.957	3,223	3,047	288	2,760	724	2,036	176
958	3,423	3,236	312	2,924	775	2,149	187
959	3,571	3,377	331	3,046	822	2,224	194
960		3,583	356	3,227	923	2,304	189
961	4,048	3,861	386	3,474	1,018	2,456	187
962		4,175	422	3,753	1,031	2,722	22 6
.963		4,495	464	4,031	1,046	2,985	271
1964		4,950	517	4,433	1,225	3,208	330
1965	•	5,526	582	4,945	1,442	3,503	394
1966		6 5,947	630	5,317	1,388	3,929	6 444
			PROJEC'	TED 7			
1967	6,971	6,500	699	5,801	1,439	4,362	
1968	*	• -	751	6,150	1,491	4,659	
1969		7,038	779	6,259	1,567	4,692	
1970			816	6,481	1,651	4,830	
1971		7,62?	866	6,761	1,731	5,030	
1972 _	_ *		921	7,082	1,807	5,275	
1973	•	•	979	7,401	1,872	5,529	
1974		•	1,032	7,708	1,941	5,767	
1975		•	1,086	8,002	2,004	5,998	
1976	•		1,140	8,259	2,050	6,209	710

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1955 through 1963.

Resident enrollment refers to enrollment in classes on the main campus or a branch campus of an institution, irrespective of the student's living quarters (on or off campus) and his legal domicile (in-State or out-of-State). Extension enrollment refers to enrollment in classes at a center or place away from the main campus or branch campus(es) of an institution.

The following types of enrollment in institutions of higher education are not included in this or other tables in this chapter: (1) Adult education (nondegree-credit courses of approximately regular length and degree-credit courses taken without reference to credit toward a degree or other formal award, by persons who have terminated their formal education); (2) degree-credit and nondegree-credit courses by mail, television, or radio; (3) short courses (considerably less than regular length but offering instruction on at least 4 separate days); and (4) individual lessons only (as in music, art, speech, etc.).

*Includes graduate students in liberal arts and sciences and students taking work beyond the first-professional degree. Graduate enrollment is somewhat higher than enrollment for advanced degrees because graduate enrollment includes

students taking work at the graduate level who are not enrolled for advanced degrees.

Includes students studying for degrees such as M.D., D.D.S., D.V.M., LL.B., B.D., and other degrees classified as first-professional. It also may include some extension graduate enrollments (see discussion of this in text).

*Vocational or general studies programs, not chiefly creditable toward a bachelor's or higher degree and extending not more than 3 years beyond high school, are designed to prepare for immediate employment in an occupation or cluster of occupations.

• Estimate for 1966 based on 1966 opening fall survey of total degree-credit and nondegree-credit enrollment not reported separately, and on 1965 opening fall survey of total degree-credit and total nondegree-credit enrollment reported separately.

7 For assumptions underlying projections and for methods of projecting, see the following text tables with accompanying footnotes and appendix table A references to corresponding tables, also with accompanying footnotes: For column 3, tables 8, 9, and 10; for column 4, tables 11 and 12; for column 5, tables 11, 13, and 14; for column 6, tables 5, 6, and 7; and for column 8, table 15.

For further methodological details, see appendix table A. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

Table 5.—First-time opening fall degree-credit resident and extension enrollment in all institutions of higher education, by sex and by control of institution: United States, 1956 to 1976¹

Year (fall)	Firet-time degree-credit	Sex		Control		
Togi (iuii)	enrollment	Men	Women	Public	Private	
(1)	(2)	(3)	(4)	(5)	(6)	
956	717,504	442,903	274,601	430,149	287,358	
957		441,969	281,910	434,066	289,81	
958		465,422	309,886	474,621	300,68	
959	821,520	487,890	333,630	501,543	319,97	
960		539,512	383,557	577,744	345,32	
961	1,018,361	591,913	426,448	648,236	370,12	
962	_ 1,030,554	598,099	432,455	669,728	360,82	
963	_ 1,046,417	604,282	442,135	686,861	359,55	
964	1,224,840	701,524	523,316	814,664	410,17	
965	1,441,822	829,215	612,607	990,021	451,80	
966 2	1,388,000	788,000	600,000	957,000	431,00	
		PROJECTEI)			
1967	1,439,000	820,000	619,000	1,002,000	437,00	
1968	1,491,000	844,000	647,000	1,047,000	443,00	
1969	1,567,000	881,000	686,000	1,113,000	454,00	
1970	1,651,000	922,000	729,000	1,182,000	469,00	
1971	1,731,000	959,000	772,000	1,247,000	483,00	
1972	1,807,000	995,000	812,000	1,314,000	493,00	
1973	1,872,000	1,024,000	848,000	1,372,000	500,00	
1974	1,941,000	1,056,000	885,000	1,434,000	508,00	
1975	2,004,000	1,085,000	918,000	1,488,000	516,00	
1976	2,050,000	1,103,000	947,000	1,533,000	517,00	

1 SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, Office of Education, circulars: "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966.

Population on which projections are based in shown in appendix table E.

Estimate based on fall 1966 survey of first-time degreecredit and nondegree-credit enrollment not reported separately, and on fall 1965 survey of total degree-credit and total nondegree-credit enrollment reported separately. First-time nondegree-credit enrollment was not reported prior to fall

The projection of first-time opening fall degree-credit enrollment in all institutions of higher education by sex and by control of institution is based on the assumption that first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will follow the 1956-66 trend to 1976 in each category of enrollment.

The projections include in each year, in addition to the number of enrollments based on the 1956-66 trend, an estimated 17,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projections. For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



Table 6.—First-time opening fall degree-credit resident and extension enrollment in 4-year institutions of higher education, by sex and by control of institution: United States, 1956 to 1976¹

N7. /6-11\	First-time degree-credit	Sex		Control			
Year (fall) (1)	enrollment (2)	Men (3)	Women (4)	Public (5)	Private (6)		
(-)							
1056	554,694	341,293	213,401	292,743	261,951		
1956	556,239	337, 332	218,307	293,544	262,695		
958	600,359	357, C78	242,681	328,242	272,117		
1959	639,841	370,633	263,208	348,150	291,691		
1960	709,093	410,942	298,151	395,884	313,209		
1961	774,584	446,248	328,336	438,135	336,449		
1962	770,114	441,936	328,178	445,191	324,923		
1963	774,744	441,220	333,524	452,104	322,640		
1964	902,599	508,117	394,482	539,251	363 _: 348		
1965	1,041,025	587,789	453,236	642,233	398,792		
1936 ²	996,000	557,000	438,000	618,000	378,000		
		PROJECTEL) 3				
1967	1,027,000	576,000	451,000	644,000	383,000		
1968		588,000	470,000	672,000	387,000		
1969		609,000	497,000	712,000	394,00		
1970		633,000	528,000	755,000	407,00		
1971		654,000	557,000	793,000	418,00		
1972	1,256,000	672,000	584,000	832,000	425,00		
1973	1,297,000	687,000	609,000	867,000	429,00		
1974		705,000	634,000	904,000	434,00		
1975		720,000	657,000	937,000	440,00		
1976		727,000	676,000	964,000	439,00		

¹ SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, Office of Education, circulars: "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966.

Population on which projections are based is shown in appendix table E.

² Estimate based on fall 1966 survey of first-time degreecredit and nondegree-credit enrollment not reported separately, and on fall 1965 survey of total degree-credit and total nondegree-credit enrollment reported separately. First-time nondegree-credit enrollment was not reported prior to fall 1966.

The projection of first-time opening fall degree-credit enrollment in 4-year institutions of higher education by sex

and control of institution is based on the assumption that first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will follow the 1956-66 trend to 1976 in each category of enrollment.

The projections include in each year, in addition to the number of enrollments based on the 1956-66 trend, an estimated 12,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefit; Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projections. For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

Table 7.—First-time opening fall degree-credit resident and extension enrollment in 2-year institutions of higher education, by sex and by control of institution: United States, 1956 to 19761

Year (fall)	First-time degree-credit	Sex		Control		
rear (tatt)	errollment	Men	Worten	Public	Private	
(1)	(2)	(3)	(4)	(5)	(6)	
1956	162,810	101,610	61,200	137,406	25,404	
1957	167.640	104,037	6 3, 60 3	140,522	27,118	
958	174,949	107,744	67,205	146,379	28,570	
959	181,679	111,257	70,422	153,393	28,286	
960	213,976	128,570	85,406	181,860	32,116	
961	243,777	145,665	98,112	210,101	33,676	
.962	260,440	156,163	104,277	224,537	35,903	
963	271,673	163,062	108,611	234,757	36,916	
964	322,241	193,407	128,834	275,413	46,828	
1965	400,797	241,426	159,371	347,788	53,009	
1966 ²	392,000	231,000	162,000	340,000	52,000	
		PROJECTE	D 3			
1967	412,000	244,000	168,000	357,000	55,000	
1968		256,000	177,000	370,000	57,000	
1989		271,000	189,000	401,000	59,000	
1976		288,000	201,000	427,000	62,000	
1971	520,C00	305,000	215,000	454,000	66,000	
1972	551,000	322,000	228,000	482,000	69,000	
1973		337,000	238,000	504,000	71,000	
1974		352,000	251,000	529,000	73,000	
1975		365,000	261,000	551,000	76,000	
1976		376,000	271,000	570,000	77,000	

1 SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, Office of Education, circulars: "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966.

Population on which projections are based is shown in appendix table E.

restinate based on fall 1966 survey of first-time degreecredit and nondegree-credit enrollment not reported separately, and on fall 1965 survey of total degree-credit and total nondegree-credit enrollment reported separately. First-time nondegree-credit enrollment was not reported prior to fall 1966.

The projection of first-time opening fall degree-credit enrollment in 2-year institutions of higher education by sex and by control of institution is based on the assumption that first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will follow the 1956-66 trend to 1976 in each category of enrollment.

The projections include in each year, in addition to the number of enrollments based on the 1956-66 trend, an estimated 5,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projections.

For further methodological details, see appendix table A. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



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TABLE 8.—Total opening fall degree-credit resident and extension enrollment in all institutions of higher education by sex, by attendance status, and by control of institution: United States, 1956 to 19781

Year (fall)	Total degree-credit	8	ex	Attendan	ce status³	Cont	ર ા
(1)	enrollment (2)	Men (3)	Women (4)	Full-time (5)	Part-time (6)	Public (7)	Private (8)
956	2,927,367	1,916,802	1,010,565	2,020,000	908,000	1,665,557	1,261,810
957	•	1,991,411	1,055,962	2,077,000	970,000	1,762,726	1,284,64
958	3,236,414	2,098,164	1,138,250	2,215,000	1,022,000	1,893,843	1,342,57
959	3,377,273	2,160,8.3	1,216,387	2,314,000	1,063,000	1,984,022	1,393,25
960	3,582,726	2,256,877	1,325,849	2,466,000	1,117,000	2,115,893	1,466,83
961	3,860,643	2,408,601	1,452,042	2,714,000	1,147,000	2,328,912	1,531,73
962	4,174,936	2,587,291	1,587,645	2,902,101	1,272,835	2,573,720	1,601,21
963	4,494,626	2,772,562	1,722,064	3,068,469	1,426,157	2,848,454	1,646,17
964		3,032,992	1,917,181	3,417,796	1,532,377	3,179,527	1,770,64
965	5,526,325	3,374,603	2,151,722	3,910,848	1,615,477	3, ა24,442	1,901,88
1966 *	5,947,000	3,576,000	2,371,000	4,262,000	1,685,000	3,959,000	1,988,00

1967 6,500,000	3,906,000	2,594,000	4,563,000	1,936,000	4,366,000	2,134,000
1968 6,902,000	4,119,000	2,783,000	4,839,000	2,063,000	4,679,000	2,223,000
1969	4,172,000	2,865,000	4,927,000	2,110,000	4,812,000	2,226,000
	4,301,000	2,995,000	5,104,000	2,192,000	5,027,000	2,269,000
	4,471,000	3,156,000	5,330,000	2,296,000	5,294,000	2,332,000
1972	4,664,000	3,339,000	5,585,000	2,418,000	5,602,000	2,400,000
	4,860,000	3,520,000	5,840,000	2,539,000	5,905,000	2,474,000
	5,039,000	3,701,000	6,087,000	2,654,000	6,201,000	2,540,000
1975	5,210,000 5,365,000	3,878,000	6,320,000 6,529,000	2,767,000 2,869,000	6,489,000 6,749,000	2,599,000 2,649,000

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; and (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1955 through 1961.

Population on which projections are based is shown in appendix table E.

³ Total opening fall degree-credit enrollment by attendance status for 1956 through 1961 is estimated from first-term enrollment by attendance status reported in "Comprehensive Report on Enrollment" surveys, biennially, 1955 through

* Estimate based on fall 1966 survey of total degree-credit and nondegree-credit enrollment not reported separately, and on fail 1965 survey of total degree-credit enrollment and total nondegree credit enrollment reported separately.

4 The projection of total opening fall degree-credit enrollment in all institutions of higher education by sex and control of institution is based on the assumption that total enrollment, expressed as a percentage of population aged 18-21 years, will follow the 1956-66 trend to 1976 in each category of enrollment.

The projection of total opening fall degree-credit enrollment in all institutions of higher education by attendance status is based on the assumption that in each enrollment category the 1965 ratio of full-time enrollment to total 'arollment will remain constant to 1976.

The projections include in each year, in addition to the number of enrollments based on the 1956-66 trend, an estimated 66,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projections.

For further methodological details, see appendix table A. NOTE.—Data are for 50 States and the District of

Columbia for all years. Because of rounding, detail may not add to totals.



TABLE 9.—Total opening fall degree-credit resident and extension enrollment in 4-year institutions of higher education by sex, by attendance status, and by control of institution: United States, 1956 to 19761

Year (fall)	Total degree-credit	s	se x	Attendar	ice status 2	Con	trol
(1)	enrollment (2)	Men (3)	Women (4)	Full-time (5)	Part-time (6)	Public (7)	Private (8)
1956	2,580,022	1,691,167	888,855	1,826,000	754,000	1,367,936	1,212,086
1957	2,678,211	1,753,732	924,479	1,871,000	807.000	1,446,736	1,231,475
1958	2,850,805	1,850,124	1,000,681	2,000,000	851,000	1,562,962	1,287,843
1959	2,967,558	1,901,132	1,066,426	2,088,000	879,000	1,628,055	1,339,503
1960	3,131,393	1,974,722	1,156,671	2,219,000	912,000	1,723,583	1,407,810
1961	3,342,718	2,088,445	1,254,273	2,421,600	922,000	1,872,531	1,470,187
1962	3,585,407	2,221,667	1,363,740	2,584,908	1,000,499	2,054,463	1,530,944
1963	3,869.837	2,385,902	1,483,935	2,741,251	1,128,586	2,297,146	1,572,691
1964	4,239,305	2,593,483	1,645,822	3,021,411	1,217,894	2,558,668	1,680,637
1965	4,684,888	2,852,757	1,832,131	3,414,545	1,270,343	2,886,552	1,798,336
1966 3	4,995,000	3,001,000	1,994,000	3,681,000	1,314,000	3,115,000	1,880,000
			PROJEC	TED 4			
1967	5,445,000	3,265,000	2,180,000	3,948,000	1,497,000	3,429,000	2,015,000
1968	5,762,000	3,430,000	2,331,000	4,175,000	1,587,000	3,665,000	2,097,000
1969	5,862,000	3,462,000	2,400,000	4,243,000	1,619,000	3,766,000	2,097,000

¹ SCURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; and (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1955 through 1961.

1971------ 6,333,000 3,691,000 2,641,000

1972...... 6,624,000 3,839,000 2,785,000

1973...... 6,921,000 3,987,000 2,935,000

1974...... 7,206,000

1975...... 7,472,000

1976...... 7,714,000

1970------ 6,064,000 3,557,000 2,507,000 4,386,000 1,677,000

4,120,000 3,086,000

Population on which projections are based is shown in appendix table E.

² Total opening fall degree-credit enrollment by attendance status for 1956 through 1961 is estimated from first-term enrollment by attendance status reported in "Comprehensive Report on Enrollment" surveys, biennially, 1955 through 1961.

* Estimate based on fall 1966 survey of total degree-credit and nondegree-credit enrollment not reported separately, and on fall 1965 survey of total degree-credit enrollment and total nondegree-credit enrollment reported separately.

* The projection of total opening fall degree-credit enrollment in 4-year institutions of higher education, by sex and

control of institution, is based on the assumption that total enrollment, expressed as a percentage of population aged 18-21 years, will follow the 1956-66 trend to 1976 in each enrollment category.

1,755,000

1,840,000

1,928,000

2,011,000

3,929,000

4,141,000

4,371,000

4,602,000

4,829,000

5,043,000

2,135,000

2,192,000

2,253,000

2,319,000

2,377,000

2,430,000

2,473,000

The projection of total opening fall degree-credit enrollment in 4-year institutions of higher education by attendance status is based on the assumption that in each enrollment category the 1965 ratio of full-time enrollment to total enrollment will remain constant to 1976.

The projections include in each year, in addition to the number of enrollments based on the 1956-66 trend, an estimated 56,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projections.

For further methodological details, see appendix table A. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not

add to totals.

4,577,000

4,783,000

4,993,000

5, 196, 000

4,247,000 3,225,000 5,383,000 2,089,000

4,360,000 3,354,000 5,552,000 2,162,000



Table 10.—Fotal opening fall degree-credit resident and extension enrollment in 2-year institutions of higher education by sex, by attendance status, and by control of institution: United States, 1956 to 1976¹

Year (fall)	Total degree-credit _	Sex		Attendanc	e status 3	Cont	rol
(1)	enrollment (2)	Men (3)	Women (4)	Full-time (5)	Part-time (6)	Public (7)	Private (8)
956	347,345	225,635	121,710	194,000	153,000	297,621	49,724
957	•	237,679	131,483	203,000	163,000	315,990	53,172
958	•	248,040	137,569	215,000	171,000	330,881	54,728
.959	•	259,754	149,961	226,000	184,000	355,967	53,748
960		282,155	169,178	247,000	205,000	392,310	59,02
961	•	320,156	197,769	293,000	225,000	456,381	61,54
962	•	365,624	223,905	317,193	272,336	519,257	70,27
963	· · · · · · · · · · · · · · · · · · ·	386,660	238,129	327,218	297,571	551,308	3,48
964	· ·	439,509	271,359	396,385	314,483	620,859	90,00
965	•	521,846	319,591	495,454	345,983	737,890	103,54
1966 ³	_ *	575,000	376,000	581,000	371,000	844,000	108,00
		_	PROJEC	red 4			
1967	1.055,000	641,000	414,000	615,000	439,000	936,000	118,00
1968		689,000	451,000	664,000	476,000	1,014,000	126,00
1969	1,175,000	710,000	465,000	684,000	491,000	1,046,000	129,00
1970		745,000	488,000	718,000	515,000	1,098,000	133,00
1971		779,000	515,000	753,000	541,000	1,154,000	141,00
1972		825,000	554,000	802,600	578,000	1,232,000	148,00
1973		873,000	585,000	847,000	611,000	1,303,000	155,00
1974		919,000	615,000	891,000	643,000	1,371,000	163,00
1975		963,000	652,000	937,000	678,000	1, 43,000	169,00
1976		1,005,000	680,000	977,000	707,000	1,509,000	176,00

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; and (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially 1955 through 1961.

Population on which projections are based is shown in appendix table E.

²Total opening fall degree-credit enrollment by attendance status for 1955 through 1961 is estimated from first-term enrollment by attendance status reported in "Comprehensive Report on Enrollment' surveys, biennially, 1955 through 1961.

*Estimate based on fall 1966 survey of total degree-credit and nondegree-credit enrollment not reported separately, and on fall 1965 survey of total degree-credit enrollment and total nondegree-credit enrollment reported separately.

The projection of total opening fall degree-credit enrollment in 2-year institutions by sex and control of institution is

based on the assumption that total enrollment, expressed at a percentage of population aged 18-21 years, will follow the 1956-66 trend to 1976 in each category of enrollment.

The projection of total opening fall degree-credit enrollment in 2-year institutions of higher education by attendance status is based on the assumption that in each enrollment category the 1965 ratio of full-time enrollment to total enrollment will remain constant to 1976.

The projections include in each year, in addition to the number of enrollments based on the 1956-66 trend, an estimated 10,000 ve erans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projections.

For further methodological details, see appendix table A. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



TABLE 11.—Total opening fall degree-credit resident and extension enrollment in all institutions of higher education, by level and type of institution: United States, 1956 to 19761 2

[In thousands]

Year (fall)		Total egree-credit enrollment		Estimated total graduate (resident)	ur	timated total idergraduate irst-professiona	1
	Total	4-year	2-year	i-year	Total	4-year	2-year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1956	2,927	2,580	347	271	2,656	2,309	347
1957	3,047	2,678	369	288	2,760	2,391	369
1958	3,236	2,851	386	312	2,924	2,539	386
19 5 9	3,377	2,968	410	331	3,046	2,636	410
19 60	3,583	3,131	451	356	3,227	2,776	45
1961	3,861	3,343	518	386	3,474	2,956	518
1962	4,175	3,585	590	422	3,753	3,163	59
1962	4,495	3,870	625	464	4,031	3,406	62
1964	4,950	4,239	711	517	4,433	3,722	71
1965	5,526	4,685	841	582	4,945	4,103	84
1966	5,947	4,995	* 952	630	5,317	4,365	95
			PROJECT	red 4			
1007	6,500	5,445	1,055	699	5,801	4,746	1,05
1967	6,902	6,762	1,140	751	6,150	5,010	1,14
1968 1969	7,038	5,862	1,175	779	6,259	5,084	1,17
1970	7,296	6,064	1,232	816	6,481	5,248	i,23
1970	7,627	6,333	1,294	866	6,761	5,467	1,29
1972	8,003	6,624	1,379	921	7,082	5,702	1,37
1972	8,380	6,921	1,458	978	7,401	5,942	1,4
1974	8,740	7,206	1,534	1,032	7,708	6,174	1,5
1975	9,088	7,472	1,615	1,086	8,002	6,387	1,6
1976	9,398	7,714	1,685	1,140	8,259	6,574	1,68

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1955 through 1963.

Total opening fall degree-credit enrollment by level was estimated from first-term enrollment by level reported in "Comprehensive Report on Enrollment" surveys, biennially, 1955 through 1961, and in the "Residence and Migration of College Students" survey, fall 1963. See text for further details of estimation methods.

* Estimate based on fall 1966 survey of total degree-credit and nondegree-credit enrollment not reported separately, and on fall 1965 survey of total degree-credit enrollment and total nondegree-credit enrollment reported separately.

4 The projection of resident graduate opening fall degreecredit enrollment in 4-year institutions of higher education was made separately by sex and by control of the institution attended and is based on the assumption that in each enrollment category the proportion of total enrollment at the graduate level will continue the 1955-63 trend to 1976.

The projection of resident and extension undergraduate and first-professional degree-credit enrollment in 4-year institu-

tions of higher education is the difference between projected total resident and extension degree-credit enrollment in 4-year institutions of higher education shown i table 9 and in column 3 above, and resident graduate opening fall degree-credit enrollment in 4-year institutions shown in column 5 above.

The projection of resident and extension undergraduate degree-credit enrollment in 2-year institutions of higher education shown in column 8 above is the same as that shown in table 10.

The projections include in each year, in addition to the number of enrollments based on the 1955-63 trend, an estimated 66,000 veterans (7,000 graduate, 49,000 undergraduate in 4-year institutions, and 10,000 undergraduate in 2-year institutions) enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed '5 be included in the trend projection.

For further methodological details, see appendix table A reference to table 11 and accompanying footnesse 22

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

Table 12.—Estimated graduate opening fall degree-credit resident enrollment in 4-year institutions of higher education by sex, by attendance status, and by control: United States, 1956 to 1976¹²

Year (fall)	Graduate degree-credit _	Sex	·	Attendance	e status	Cont	rol
(1)	enrollment (2)	Men (3)	Women (4)	Full-time (5)	Part-time (6)	Public (7)	Private (8)
1956	271,000	196,000	76,000	106,000	165,000	133,000	138,000
1957	•	208,000	80,000	113,000	174,000	145,000	142,000
1958		225,000	87,000	124,000	189,000	161,000	151,000
959		237,000	94,000	131,000	200,000	172,000	159,000
960		253,000	103,000	143,000	213,000	187,000	169,000
961	386,000	273,000	113,000	162,000	224,000	208,000	179,000
962	422,000	298,000	124,000	177,000	245,000	234,000	189,000
1963	464,000	327,000	137,000	188,000	276,000	267,000	196,000
964	517,000	363,000	154,000	214,000	303,000	305,000	212,000
965	582,000	409,000	173,000	254,000	328,000	352,000	230,000
1966	630,000	439,000	191,000	275,000	355,000	387,000	243,000
		-	PROJEC	red :			
1967	699,000	488,000	211,000	306,000	393,000	434,000	265,000
1968	· · · · · · · · · · · · · · · · · · ·	524,000	228,000	329,000	422,000	473,000	278,000
1969	•	541,060	237,000	342,000	437,000	497,000	281,00
1970	•	565,000	251,000	358,000	457,000	527,06C	289,00
1971	866,000	598,000	268,000	381,000	485,000	568,000	298,00
1972	•	636,000	285,000	406,000	515,000	610,000	311,00
1973	979,000	674,000	305,000	432,000	547,000	656,000	323,00
1974	•	709,000	323,000	456,900	57 6, 00 0	098,000	334,00
1975		745,000	341,000	481,000	605, 0 0	741,000	345,00
1976		779,000	360,000	505,000	635,000	786,000	354,00

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1956 through 1963.

Total opening fall degree-credit enrollment in 4-year institutions by level and attenuance status 1955 to 1966 was estimated from first-term enrollment by level and attendance status reported in "Comprehensive Report on Enrollment" surveys, biennially, 1955 through 1961 and in the "Residence and Migration of College Students" survey, fall 1963. The estimates were adjusted to agree with degree-credit enrollment by attendance status reported in the "Opening Fall Enrollment" surveys, 1962 through 1965, and with the total degree-credit and nondegree-credit enrollment by attendance status reported in the "Opening Fall Enrollment" survey of 1966.

The projection of graduate opening fall degree-credit

enrollment in 4-year institutions of higher education by sex and by control of institution is based on the assumption that in each enrollment category the proportion of total enrollment at the graduate level will continue the 1955-63 trend to 1976.

The projection of graduate opening fail degree-credit enrollment in 4-year institutions by attendance status is based on the assumption that in each enrollment category the estimated 1965 ratio of full-time enrollment to total enrollment will remain constant to 1976.

The projections include in each year, in addition to the number of enrollments based on the 1955-63 trend, an estimated 7,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projection. For further methodological details, see appendix table A.

NO E.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



Table 13.—Estimated undergraduate opening fall degree-credit resident and extension enrollment in all institutions of higher education by sex, by attendance status, and by control of institution: United States, 1956 to 1976¹²

Year (fall)	Under- graduate		Sex	Attenda	nce status	Co	ntrol
(1)	degree-credit enrollment (2)	Men (3)	Women (4)	Full-time (5)	Part-time (6)	Public (7)	Private (8)
1956	2,656,000	1,721,000	935,000	1,913,000	743,000	1,532,000	1,124,000
1957	2,760,000	1,783,000	976,000	1,964,000	796,000	1,618,000	1,142,000
1958		1,873,000	1,051,000	2,091,000	833,000	1,733,000	1,142,000
959		1,924,000	1,122,000	2, 183, 000	863,000	1,812,000	1,192,000
960	3,227,000	2,004,000	1,223,000	2,323,000	904,000	1,929,000	1,234,000
961	•	2,135,000	1,339,000	2,552,000	922,000	2,121,000	
962		2,290,000	1,463,000	2,725,000	1,028,000	2,340,000	1,353,000 1,413,000
963	4,031,000	2,446,000	1,585,000	2,881,000	1,151,000	2,540,000	
964		2,670,000	1,764,000	3, 204, 000	1,229,000	2,875,000	1,450,000 1,559,000
965		2,966,000	1,979,000	3,656,000	1,289,000	3,273,000	
966		3,137,000	2,180,000	3,986,000	1,331,000	3,572,000	1,672,000 1,745,000
			PROJEC	TED 3		-	
967		3,417,000	2,384,000	4,258,000	1,543,000	3,932,000	1,869,000
968		3,595,000	2,555,000	4,510,000	1,641,000	4,205,000	1,945,000
969		3,631,000	2,628,000	4,586,000	1,673,000	4,315,000	1,945,000
970		3,736,000	2,744,000	4,746,000	1,735,000	4,501,000	1,980,000
971		3,872,000	2,889,000	4,949,000	1,812,000	4,727,000	2,034,000
972	7,082,000	4,028,000	3,054,000	5,179,000	1,903,000	4,992,000	2,089.000
978		4,186,000	3,215,000	5,409,000	1,992,000	5,249,000	2,151,000
974		4,330,000	3,378,000	5,631,000	2,077,000	5,503,000	2,205,000
975		4,465,000	3,536,000	5,840,000	2,162,000	5,748,000	2,254,000
976	8 259 000	4,585,000	3,673,000	6,024,000	2,234,000	5,964,000	2,295,000

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; (2) "Resident and Extension Enrollment in Institution of Higher Education," biennially, 1955 through 1963.

Total opening fall degree-credit enrollment by level and attendance status 1955 to 1966 was estimated from first-term enrollment by level and attendance status reported in "Comprehensive Report on Enrollment" surveys, biennially, 1955 through 1961, and in the "Residence and Migration of College Students" survey, fall 1963. The estimates were adjusted to agree with degree-credit enrollment by attendance status reported in the "Opening Fall Enrollment" surveys, 1962 through 1965, and with the total degree-credit and nondegree-credit enrollment by attendance status reported in the "Opening Fall Enrollment" survey of 1966.

3 The projection of undergraduate openingfall degree-credit enrollment in all institutions of higher education, by sex and by control of institution, is based on the assumption that in each enrollment category the proportion of total enrollment at the undergraduate level will continue the 1955-63 trend to 1976.

The projection of undergraduate opening fall degree-credit enrollment in all institutions by attendance status is based on the assumption that in each enrollment category the estimated 1965 ratio of full-time enrollment to total enrollment will remain constant to 1976.

The projections include in each year, in addition to the number of enrollments based on the 1955-63 trend, an estimated 59,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projection.

For further methodological details, see appendix table A. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



Table 13.—Estimated undergraduate opening fall degree-credit resident and extension enrollment in all institutions of higher education by sex, by attendance status, and by control of institution: United States, 1956 to 19761 2

Year (fall)	Under- graduate		Sex	Attenda	nce status	Co	ntrol
(1)	degree-credit enrollment (2)	Men (3)	Women (4)	Full-time (5)	Part-time (6)	Public (7)	Private (8)
1956	2,656,000	1,721,000	935,000	1,913,000	743,000	1,532,000	1,124,000
1957		1,783,000	976,000	1,564,000	796,000	1,618,000	1,142,000
1958	2,924,000	1,873,000	1,051,000	2,091,000	833,000	1,733,000	1,192,000 $1,192,000$
1959	3,046,000	1,924,000	1,122,000	2,183,000	863,000		1,234,000
1960	3,227,000	2,004,000	1,223,000	2,323,000	904,000	1,929,000	1,298,000
1961		2,135,000	1,339,000	2,552,000	\$20,000	2,121,000	1,353,000
1962	3,753,000	2,290,000	1,463,000	2,725,000	1,028,000	2,340,000	1,413,000
1963	4,031,000	2,446,000	1,585,000	2,881,000	1,151,000	2,581,000	1,450,000
964	4,433,000	2,670,000	1,764,000	3,204,000	1,229,000	2,875,000	1,559,000
965		2,966,600	1,979,000	3,656,000	1,289,000	3,273,000	1,672,600
966	5,317,000	3,137,000	2,180,000	3,986,000	1,331,000	3,572,000	1,745,000
			PROJEC'	red 3			
967	5,801,000	3,417,000	2,384,000	4,258,000	1,543,000	3,932,000	1,869,000
968		3,595,000	2,555,000	4,510,000	1,641,000	4,205,000	1,945,000
969	6,259,000	3,631,000	2,628,000	4,586,000	1,673,000	4,315,000	1,945,000
970	6,481,000	3,736,000	2,744,000	4,746,000	1,735,000	4,501,000	1,980,000
971	6,761,000	3,872,000	2,889,000	4,949,000	1,812,000	4,727,000	2,034,000
972	7,082,000	4,028,000	3,054,000	5,179,000	1,903,000	4,992,000	2,089,000
973		4,186,000	3,215,000	5,409,000	1,992,000	5,249,000	2,151,000
974	7,708,000	4,330,000	3,378,000	5,631,000	2,077,000	5,503,000	2,205,000
975		4,465,000	3,536,000	5,840,000	2,162,000	5,748,000	2,254,000
976	8,259,000	4,585,000	3,673,000	6,024,000	2,234,000	5,964,000	2,295,000

¹ SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1955 through 1963.

² Total opening fall degree-credit enrollment by level and attendance status 1955 to 1966 was estimated from first-term enrollment by level and attendance status reported in "Comprehensive Report on Enrollment" surveys, biennially, 1955 through 1961, and in the "Residence and Migration of College Students" survey, fall 1963. The estimates were adjusted to agree with degree-credit enrollment by attendance status reported in the "Opening Fall Enrollment" surveys, 1962 through 1965, and with the total degree-credit and nondegree-credit enrollment by attendance status reported in the "Opening Fall Enrollment" survey of 1966.

* The projection of undergraduate opening fall degree-credit enrollment in all institutions of higher education, by sex and

by control of institution, is based on the assumption that in each enrollment category the proportion of total enrollment at the undergraduate level will continue the 1955-63 trend

The projection of undergraduate opening fall degree-credit enrollment in all institutions by attendance status is based on the assumption that in each enrollment category the estimated 1965 ratio of full-time enfollment to total enrollment will remain constant to 1976.

The projections include in each year, in addition to the number of enrollments based on the 1955-63 trend, an estimated 59,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projection.

For further methodological details, see appendix table A. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not

Table 14.—Estimated undergraduate opening fall degree-credit resident and extension enrollment in 4-year institutions of higher education by sex, by attendance status, and by control of institution: United States, 1956 to 1976¹²

	Under-	Se	x	Attendance	e status	Cont	rol
Year (fall)	graduate degree-credit enrollment (2)	Men (3)	Women (4)	Full-time (5)	Part-time (6)	Public (7)	Private (8)
956	2,309,000	1,498,600	813,000	1,719,000	590,000 633,000	1,235,000 1,302,000	1,074,000 1,089,000
957	2,391,000	1,546,000	845,000	1,758,000	662,000	1,402,000	1,137,000
958	2,539,000	1,625,000	914,000	1,876,000		1,456,000	1,181,000
959	2,636,000	1,664,000	972,000	1,957,000	679,000	1,537,000	1,239,000
960	2,776,000	1,722,000	1,054,000	2,077,000	699,000		1,291,000
961	_ 2,956,000	1,815,000	1,141,000	2,258,000	699,000	1,665,000	1,342,000
962	_ 3,163,000	1,924,000	1,239,000	2,408,000	755,000	1,821,000	
1963	_ 3,406,000	2,059,000	1,347,000	2,553,000	853,000	2,030,000	1,377,000
1964	_ 3,722,000	2,230,000	1,492,000	2,808,000	914,000	2,254,000	
1965	4,103,000	2,444,000	1,659,000	3,160,000	943,000	2,535,000	1,569,000
1966		2,562,000	1,804,000	3,405,000	960,000	2,728,000	1,637,000

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1056 through 1966; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1955 through 1963.

²Total opening fall degree-credit enrollment in 4-year institutions by level and attendance status 1955 to 1966 was estimated from first-term enrollment by level and attendance status reported in the "Comprehensive Report on Enrollment" surveys, biennially, 1955 through 1961 and in the "Residence and Migration of College Students" survey, fall 1963. The estimates were adjusted to agree with enrollment by attendance status reported in the "Opening Fall Enrollment" surveys, 1962 through 1965, and with the total degree-credit and nondegree-credit enrollment by attendance status reported in the "Opening Fall Enrollment" survey of 1966.

The projection of undergraduate opening fall degree-credit enrollment in 4-year institutions of higher education by sex

and control of institution is based on the assumption that in each enrollment category the proportion of total enrollment at the undergraduate level will continue the 1955-63 trend to 1975

The projection of undergraduate opening fall degree-credit enrollment in 4-year institutions by attendance status is based on the assumption that in each enrollment category the estimated 1965 ratio of full-time enrollment to total enrollment will remain constant to 1976.

The projections inc 'de in each year, in addition to the number of enrollments based on the 1955-63 frend, an estimated 49,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projection.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



TABLE 15.—Estimated opening fall nondegree-credit resident and extension enrollment in institutions of higher education, by attendance status and by control of institution: United States, 1956 to 1976¹

Year (fall)	Total von- degree-credit *	Attendance	status ?	Contro	ol
(1)	(2)	Full-time (3)	Part-time (4)	Public (5)	Private (6)
1\ ³ .\6	168,000	67,000	101,000	126,000	42,000
1957	176,000	70,000	106,000	133,000	48,000
1958	187,000	75,000	112,600	143,000	44,000
1959	194,000	78,000	116,000	149,000	45,000
1960	189,000	76,000	113,000	144,000	45,000
1961	187,000	75,000	112,000	141,000	46,000
1962	226,000	90,000	136,000	176,000	50,000
1963	271,241	108,000	163,000	217,394	53,847
1964	329,847	132,000	198,000	288,181	41,666
1965	394,539	158,000	237,000	345,154	49,385
1966 4	443,000	177,000	266,000	391,000	53,000
	PROJI	ECTED 5			
1967	471,000	189,000	282,000	415,000	56,000
1968	502,000	202,000	300,000	444,000	58,000
1969	515,000	207,000	308,000	457,000	58,000
1970	536,000	215,000	321,000	477,000	59,000
1971	564,000	227,000	337,000	503,000	61,000
1972	595,000	239,000	356,000	532,000	33,000
1973	626,000	252,000	374,000	561,000	65,000
1974	655,000	263,000	392,000	589,000	66,000
1975	684,000	275,000	409,000	616,000	68,000
1976	710,000	285,900	425,000	641,000	69,000

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1955 through 1961; and (3) sample survey of full-time equivalent enrollments and credit hours, fall 1964, unpublished.

* Nondegree-credit opening fall enrollment includes enrollment in occupational or general studies programs not chiefly creditable toward a bachelor's or higher degree but excludes enrollment in adult education courses.

I' indegree-credit opening fall enrollment estimates for the years prior to 1963 were based on "Comprehensive Report of Enrollment" surveys, 1955 through 1961.

* Estimates of attendance status of students were based on the 1964 sample survey of full-time equivalent enrollments and credit hours.

• Nondegree-credit opening fall enrollment estimates for 1966 were based on fall 1966 survey of total degree-credit and nondegree-credit enrollment not reported separately and on fall 1965 survey of total degree-credit enrollment and total nondegree-credit enrollment reported separately.

The projection of nondegree credit enrollment in all

institutions of higher education by control of institution is based on the assumption that in each control category the 1965 ratio of opening fall nondegree-credit enrollment to opening fall degree-credit enrollment will remain constant to 1973.

The projection of nondegree-credit enrollment in all institutions of higher education by attendance status is based on the assumption that the ratio of full-time nondegree-credit enrollment to total nondegree-credit enrollment from the 1964 full-time equivalent enrollment and credit hours sample survey will (1) apply to both public and private institutions, and (2) remain constant to 1976. These ratios were 40 percent full time, 60 percent part time.

The projections include in each year, in addition to the number of enrollments based on the 1956-66 trend, an estimated 5,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended wit out this assistance are assumed to be included in the trend rojections.

For further methodological details, see appendix table A. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

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TABLE 16.—Estimated full-time equivalent of total full-time and part-time opening fall resident and extension enrollment in institutions of higher education, by degree-credit status of student and by control of institutions: United States, 1966 to 1978 13

Year (fall)		All students		Students toward a b	Students taking work creditable toward a bachelor's or higher degree	ee gree	Studes or gener not clue	Students in occupational or general studies programs not chieffy creditable toward is bachelor's degree	ms ard
(1)	Total (2)	Public (3)	Private (4)	Total (5)	Public (6)	Private (7)	Total (8)	Public (9)	Private (10)
1956	2,415,000	1,391,000	1,024,000	2,319,000	1,319,000	1,000,000	96,000	72,000	24,000
1957	2,497,000	1,457,000	1,040,000	2,397,000	1,381,000	1,016,000	100,000	76,000	24,000
1958	2,658,000	1,570,000	1,088,000	2,552,000	1,489,000	1,063,000	106,000	81,000	25,000
1959	2,775,000	1,647,000	1,128,000	2,665,000	1,562,000	1,103,000	110,000	85,000	25,000
1960	2,943,000	1,749,000	1,194,000	2,835,000	1,667,000	1,168,000	108,000	82,000	26,000
1961	3,738,000	1,948,000	1,250,000	3,092,000	1,868,000	1,224,000	106,000	80,000	26,000
1962	3.450,000	2,141,000	1,309,000	3,322,000	2.041,000	1,281,000	128,000	100,000	28,000
1963	3,693,000	2,348,000	1,345,000	3,539,000	2,225,000	1,314,000	154,000	123,000	31,000
1964	4,112,000	2,668,000	1,444,000	3,924,000	2,504,000	1,420,000	188,000	164,000	24,000
1965	4,667,000	3,091,000	1,576,000	4,443,000	2,895,000	1,548,000	224,000	196,000	28,000
1966	5,052,000	3,386,000	1,666,000	4,800,000	3,164,000	1,636,000	252,000	222,000	30,000
				PROTECTED :					
1967	5,472,000	3,707,000	1,765,000	5,204,000	3,471,000	1,733,000	268,000	236,000	32,000
1968	5,808,000	3,969,000	1,339,000	5,521,000	3,716,000	1,805,000	287,000	253,000	34,000
1969	5,919,000	4,079,000	1,840,000	5,625,000	3,819,000	1,806,000	294,000	260,000	34,000
1970	6,135,000	4,260,000	1,875,000	5,829,000	3,988,000	1,841,000	306,000	272,000	34,000
1971	6,411,000	4,484,000	1,927,000	6,089,000	4,197,000	1,892,000	322,000	287,000	35,000
1972	6,723,000	4,741,000	1,982,000	6,384,000	4,438,000	1,946,000	339,000	303,000	36,000
1973	7,038,000	4,994,000	2,044,000	6,680,000	4,674,000	2,006,000	358,000	320,000	38,000
1974	7,337,000	5,241,000	2,096,000	6,964,000	4,906,000	2,058,000	373,006	335,000	38,000
1975	7,625,000	5,481,000	2,144,000	7,235,000	5,130,000	2,105,000	390,000	351,000	39,000
1976	7,881,000	5,697,000	2,184,000	7,477,000	5,332,000	2,145,000	404,000	365,000	39,000
0.0									

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1955 through 1961; and (3) sample survey of full-time equivalent enrollments and credit hours, fall 1964, unpublished.

The estimate of full-time equivalent opening fall enrollment 1956 to 1966 is the sum of full-time opening fall enrollment and full-time equivalent of part-time opening fall enrollment. (Full-time and part-time opening fall degree-credit enrollment is shown in table 8. Full-time and part-time opening fall nondegree-credit enrollment is shown in table 15.)

The estimate of full-time equivalent of part-time enrollment is based on the proportion of part-time enrollment found to be equivalent to full-time enrollment for degree-creait students and for nondegree-credit students in the 1964 sample survey of full-time equivalent enrollment and credit hours. These equivalents were: For degree-credit enrollment, 33 percent

of part time; for nondegree-credit enrollment 28 percent of part time.

The projection of the full-time equivalent of part-time enrollment is based on the assumption that the 1964 percentages of part-time enrollment equivalent to full-time enrollment (33 percent for degree-credit students and 28 percent for nondegree-credit students) will remain constant to 1976.

The projections include in each year, in addition to the number of full-time equivalent enrollments based on the 1956-66 trend, an estimated 48,000 full-time equivalent enrollments of veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projections.

For further methodological details, see appendix table A. NOTE.—Deta are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

Chapter II

High School Graduates and College Degrees

Frances E. Ryan and Nadine C. Brown

High school graduates

The number of high school graduates increased from 1.4 million in the school year 1956-57 to an estimated 2.7 million in 1966-67, and is expected to increase to 3.6 million in 1976-77. These figures include graduates from all public and nonpublic high schools in the United States. Fewer than one percent of the public school graduates are from Federal schools for Indians, schools on Federal installations, residential schools for exceptional children, and subcollegiate departments of colleges and universities. About three percent of the nonpublic school graduates are from residential schools for exceptional children and subcollegiate departments of colleges and universities. The remainder are from regular nonpublic day schools.

The number of high school graduates is not expected to increase as fast in the next 10 years as it cid in the last decade. The increase between 1956-57 and 1966-67 was 85 percent. The increase between 1966-67 and 1976-77 is projected as 33 percent. This smaller increase is in line with the leveling off in the projected number of 18-year-olds. The increase in this age group was 57 percent between 1956-57 and 1966-67 but is projected to be only 19 percent between 1966-67 and 1976-77.

Projected high school graduates by sex and by control of school are shown in table 17. The projection of public high school graduates to 1976-77 is based on the assumption that, for boys and for girls separatel, high school graduates expressed as a percentage of the 18-year-old population will follow the 1956-57 to 1966-67 trend. The projection of nonpublic high school graduates is based on the assumptions that (1) the ratio of nonpublic high school graduates to public high school graduates will approximate the ratio of nonpublic grade 9-12 enrollments to public grade 9-12 enrollments in each year; and (2) the 1956-57 to 1966-67 trend in this ratio will continue to 1976-77.

Girls make up slightly more than half of the graduates at the present time although the number of 18-year-old boys exceeds the number of 18-year-old girls. The number of boys graduating, however, has been increasing faster than the number of girls. The percentage increase between 1956-57 and 1966-67 was 91 for boys, and 79 for girls.

The number of graduates from nonpublic schools has been increasing more slowly than the number from public schools. The increase for nonpublic schools between 1956-57 and 1966-67 was 64 percent, for public schools, 88 percent. The increases in the 1966-67 to 1976-77 period are expected to be 20 percent for nonpublic schools and 34 percent for public schools.

Earned degrees by level and sex

Earned degrees for each sex at all levels—bachel r's and first-professional, master's and doctor's—have shown large increases in the last 10 years. The estimated increases were: Bachelor's degrees, over 60 percent; master's degrees and doctor's degrees, each over 100 percent. These growth rates are expected to be maintained at or near the same levels during the next 10 years.

The total number of bachelor's and first-professional degrees granted annually rose from 338,000 in 1956-57 to an estimated 570,000 in 1966-67, and is expected to be 961,000 in 1976-77. The proportion granted to women rose from 35 percent of the total granted in 1956-57 to an estimated 41 percent in 1966-67 and, on the basis of this trend, is expected to increase to 44 percent in 1976-77.

The number of master's degrees climbed from 62,000 in 1956-57 to an estimated 133,000 in 1966-67 and are expected to be 248,000 in 1976.77. The proportion of master's degrees granted to women was 32 percent in 1964-65 and is expected to remain at or slightly below this level during the next 12 years.

The annual output of doctor's degrees increased from 8,800 in 1956-57 to an estimated 18,800 in 1966-67 and is expected to be 38,700 in 1976-77. The proportion of doctor's degrees granted to women was 11 percent in 1964-65 and is expected to remain near this level during the next 12 years.

The projected degrees by level and sex are shown in table 18. Each level was projected separately for men and for women. The main assumption underlying these projections was that the relationships



between college-age population and the number of degrees granted at each of the three levels during the 1967-68 to 1976-77 period will continue the 1956-57 through 1964-65 trend. The trend, which is toward an increasing percentage of the college-age population completing undergraduate requirements and continuing on for advanced degrees, is reflected in the degree projections presented here.

Further details on the methodology may be found in appendix table B.

Earned degrees by level and field

The fields presented are divided into two main groups at each level. These groups are (a) natural sciences and related professions and (b) social sciences, humanities, and related professions. The fields included in both groups and the percentage distribution of degrees by level and field for the years 1956-57, 1966-67, and 1976-77 are shown in table 19.

The projected number of earned degrees by level and field are shown in tables 20, 21, and 22. These projections are based on the assumption that the percentage distribution of degrees by field for each level will continue the 1956-57 to 1964-65 trend. For example, if the proportion of total degrees granted in a particular field has been increasing, it is assumed that it will continue to increase. The proportions thus projected, which are summarized in table 19, were applied to the projected total number of degrees for the corresponding level shown in appendix table I. Separate projections were made for men and for women.

First-level degrees by field

In 1956-57, about one-fourth of all first-level degrees (bachelor's and first-professional degrees) were awarded in the fields of study constituting the natural sciences and related professions. The remaining three-fourths were awarded in the social sciences, humanities, and related professions. These proportions are expected to change little between 1956-57 and 1976-77.

The total number of first-level degrees granted in the natural sciences rose from 96,000 in 1956-57 to an estimated 145,000 in 1966-67 and is expected to be 242,000 in 1976-77. First-level degrees granted in the social sciences, humanities, and related professions rose from 244,000 in 1956-57 to an estimated 429,000 in 1966-67, and are expected to total 728,000 in 1976-77.

First-level degrees by the field of study in which they were awarded are shown in table 20. The three fastest growing fields of study at this level are mathematics and statistics, foreign languages, and psychology. The numbers of degrees in the field of agriculture and forestry are expected to decrease, while those in the nealth professions are expected to remain almost static.

Second-level degrees by field

The proportion of second-level degrees awarded in the natural sciences and related professions is expected to rise from one-fifth of all second-level degrees in 1956-57 to a projected one-third in 1976-77. Conversely, the proportion of these degrees awarded in the social sciences, humanities, and related professions is expected to drop from fourth-fifths in 1956-57 to two-thirds in 1976-77.

The total number of second-level degrees awarded in the natural sciences and related professions rose from 14,000 in 1956-57 to an estimated 38,000 in 1966-67 and is expected to be 85,000 by 1976-77. Second-level degrees in the group of fields composed of the social sciences, humanities, and related professions rose from 48,000 in 1956-57 to an estimated 95,000 in 1966-67 and are expected to rise to 163,000 by 1976-77.

Second-level degrees by the fields in which they were awarded are shown in table 21. The fastest growing fields at this level are science (general program), mathematics and statistics, and library science. Slightly less than half as many degrees are expected in 1976-77 in agriculture and forestry as were granted in 1956-57.

Master's degrees in education are expected to increase only 26 percent between 1966-67 and 1976-77. The number of degrees in education does not reflect the total number of persons preparing to teach, however. Prospective teachers earning degrees with majors in subject fields such as mathematics, sciences, English, and history are included with the appropriate subject fields rather than in education. The actual number of prospective teachers with majors in subject fields has shown large increases recently.

Doctor's degrees by field

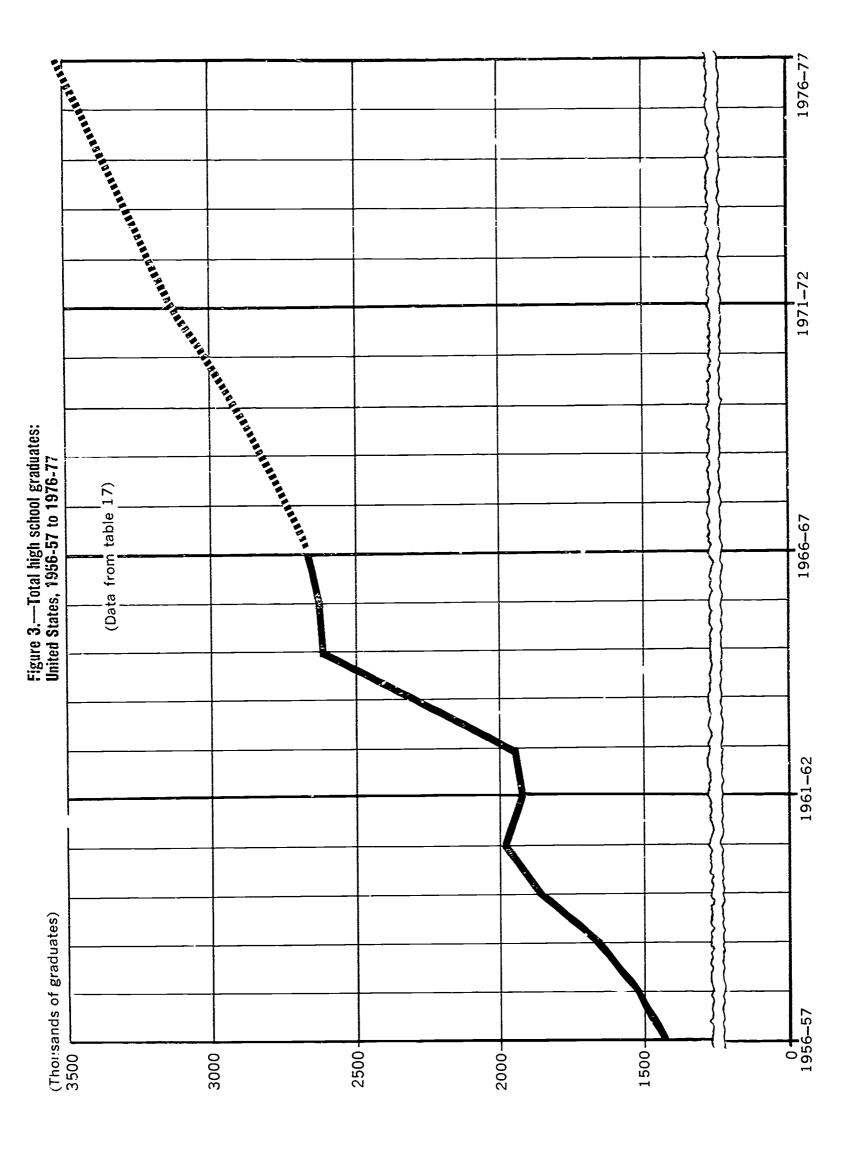
Nearly one-half of all doctor's degrees awarded in 1956-57 were in the subject fields which make up the natural sciences and related professions. This proportion is expected to rise to 55 percent by 1976-77. The remaining doctor's degrees will be awarded in the group of subject fields included under the social sciences, humanities, and related professions.



The total number of doctor's degrees granted in the natural sciences and related professions rose from 4,100 in 1956-57 to an estimated 9,600 in 1966-67 and is expected to be 21,100 in 1976-77. Doctor's degrees granted in the social sciences, humanities, and related professions rose from 4,600 in 1956-57 to an estimated 9,200 in 1966-67 and are expected to be 17,600 by 1976-77.

Doctor's degrees by area of specialization are shown in table 22. The fastest growing subject fields were engineering, mathematics and statistics, and social work. The only field of study with no increase in doctor's degrees expected in 1976-77 over 1966-67 is the health professions.





1976-77 1971-72 Figure 4.—Earned degrees, by level: United States, 1956-57 to 1976-77 (Data from table 18) 1966-67 BACHELOR'S MASTER'S DOCTOR'S TOTAL DEGREES 1961–62 (Thousands of degrees) 1956-57 200 1300 7 0 1200 1100 1000 400 900 800 700 900 500 300 100

TABLE 17.—Total high school graduates, by sex and by control of school: United States, 1956-57 to 1976-771
[In thousands]

Year	Total high	Sex		Contr	ol *
(1)	graduates ² (2)	Boys (3)	Girls (4)	Public (5)	Private (6)
956–57	1,446	696	750	1,282	164
957-58		729	784	1,344	169
958-59	•	790	849	1,447	192
959-60		898	966	1,633	231
960-61		958	1,013	1,732	239
961-62		941	984	1,685	240
962-63		959	991	1,717	233
1963-64		1,123	1,167	2,015	275
1964~65		1,301	1,337	2,366	272
1965~66 4		1,314	1,330	2,373	271
1966-67 5		1,329	1,344	2,404	269
Pl	ROJECTED	•			
1967-68	2,742	1,364	1,378	2,468	274
1968-69		1,421	1,434	2,572	283
969-70		1,481	1,492	2,681	292
1970–71		1,538	1,549	2,789	298
[9 71 - 72		1,590	1,599	2,883	306
[972–73		1,633	1,639	2,961	311
973-74		1,678	1,682	3,046	314
1974-75		1,716	1,719	3,117	318
1975–76		1,742	1,743	3,165	320
197677	9 550	1,778	1,774	3,229	323

1 SOURCES: High school graduate data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education, publications: (1) "Statistics of Public Schools," fall 1964 through fall 1966; (2) "Statistics of State School Systems," biennially, 1955-56 through 1959-60; and (3) "Nonpublic School Enrollments in Grades 9-12, Fall 1964, and Graduates, 1963-64."

Includes regular public and nonpublic schools, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations.

More than 99 percent of public school graduates and 97 percent of nonpublic school graduates are graduates of regular day schools.

- 4 Preliminary.
- Estimated
- 4 The projection of public high school graduates is based on

the assumptions: (1) The number of boys graduating expressed as a percentage of the number of boys in the population 18 years of age, will follow the 1956-57 to 1966-67 trend; and (2) the number of girls graduating, expressed as a percentage of the number of girls in the population 18 years of age, will follow the 1956-57 to 1966-67 trend.

The projection of nonpublic high school graduates is based on the assumptions: (1) The number of nonpublic high school graduates will be the same percentage of public high school graduates as the nonpublic enrollment in grades 9-12 is of public enrollment in grades 9-12; and (2) the percentage of boys among nonpublic high school graduates (48.2 percent in 1963-64) will remain constant to 1976-77.

For further methodological details, see appendix table B.

NOTE.—Data are for 50 States and the District of
Columbia for all years. Because of rounding, detail may not
add to totals.

Table 18.—Earned degrees, by level and sex: United States, 1956-57 to 1976-77 1

37	Bachelor's	and first-pro degrees 3	ofessional	Master's (ex	cept 1st-pro	ofessional)	Doctor's (ex	cept 1st-pr degrees 4	ofessional)
Year	Total (2)	Men (3)	Women (4)	Total (5)	Men (6)	Women (7)	Total (8)	Men (9)	Women (10)
1050 57	338,436	221,650	116,786	61,940	41,329	20,611	8,756	7,817	939
1956-57	363,502	241,560	121,942	65,586	44,229	21,357	8,942	7,978	964
1957–58	382,904	253,488	129,416	69,559	47,389	22,170	9,360	8,371	989
1958-59	•	254,063	138,377	74,435	50,898	23,537	9,829	8,801	1,028
1959-60	398,712	254,216	144,496	78,227	54,128	24,099	10,575	9,463	1,112
1960-61	417,846	260,531	157,315	87,855	58,686	29,169	11,622	10,377	1,245
1961-62	447,622	273,169	174,453	91,366	62,911	28,455	12,822	11,448	1,374
1962–63		298,046	200,608	101,050	68,969	32,081	14,490	12,955	1,535
1963-64		317,669	217,362	112,124	76,161	35,963	16,467	14,692	1,775
1964-65	•	316,000	220,000	126,100	86,000	40,100	17,500	15,600	1,900
1965–66 ⁵ 1966–67 ⁵	,	335,000	235,000	132,800	90,800	42,000	18,800	16,800	2,000
			P	ROJECTE	D •				
1967-68	673,000	393,000	280,000	134,700	92,500	42,200	21,000	18,700	2,300
1968-69		430,000	309,000	145,300	100,000	45,300	23,600	21,000	2,600
1969-70	•	427,000	309,000	173,600	120,600	53,600		22,100	2,70
1970-71	•	432,000	318,000	193,000	134,000	59,000	24,900	22,200	2,70
1971-72	•	447,000	332,000	194,200	135,000	59,200		23,900	2,90
1972-73	•	465,000	351,000	200,700	140,000	60,700	32,000	28,500	3,50
1973-74		486,000	370,000	210,200	147,000	63,200		31,600	3,90
1974-75		505,000	389,000	221,500	155,000	66,500	35,800	31,900	3,90
1975-76	•	523,000	407,000	235,200	165,000	70,200	36,900	32,800	4,10
1010 10	061 000	527,000	424 000	247 700	173,700	74.000	38.700	34,400	4,30

1976-77----- 961,000 537,000 424,000 247,700 173,700 74,000 38,700 34,400

1 SOURCES: Degree data from U.S. Department of Health, Education, and Welfare, Office of Education publications on "Earned Degrees Conferred by Institutions of Higher Education" (1956-57 through 1963-64) and unpublished data for 1964-65.

* First-professional degrees include: (1) Bachelor's degrees requiring 5 or more years of work; (2) master's degrees in professional fields which have not been preceded by a professional degree in the same field; and (3) doctor's degrees in cer tain fields which have not been preceded by professional degrees in the same field, such as doctor of jurisprudence, doctor of medicine, doctor of dental surgery, and doctor of veterinary medicine. The number of first-professional degrees was reported for the academic year 1964-65 as 45,946 or about 8.5 percent of total bachelor's and first-professional degrees.

Master's degrees include: (1) Master's degrees preceded by the 4-year bachelor's degree; (2) 2d-professional degrees preceded by the 5-or-more year first-professional degree; and

(3) professional degrees beyond the second-professional degree but below the level of the doctorate, such as education

Doctor's degrees include: (1) The Ph.D. in any field; and (2) such degrees as doctor of education, doctor of juridical science, doctor of public health (preceded by professional degree in medicine or sanitary engineering).

• Estimated.

The projection of earned degrees is based on the assumption that the percentage of degrees to population for each level and sex will continue the 1955-56 to 1964-65 trends. (Age of the population at the time of graduation for the first level was assumed to be 22 years; for the second level, 24 years; for the doctorate level, 27 years.)

For methodological details, see appendix table B.

NOTE .- Data include 50 States and the District of Columbia for all years. Data for the United States and outlying areas are shown in appendix table I. Because of rounding, detail may not add to totals.



TABLE 19.—Percentage distribution of degrees, by field and level: United States and outlying areas, 1956-57 to 1976-77 1 A. NATURAL SCIENCES AND RELATED PROFESSIONS

Year (1)	Total number of degrees (2)	Total natural sciences (3)	Mathematics and statistics* (4)	Engineering (5)	Physical sciences: (6)	Biological sciences ⁴ (7)	Agriculture and forestry (8)	Health professions ⁶ (9)	Science, general program (10)
		Bachelor's	r's and 1st professional	fessional					
1956–57	340,347 574,000 970,000	28.2 25.3 24.9	4.2 6.9	6.5 8.5 8	8. 4. r.	4.1 4.9 5.6	2.3	6.8 7.4 8.	0.5
		Macter's (e	(except 1st professional)	ofessional)					
1956–57 1966–67 °	61,955 132,900 247,800	22.2 28.3 34.1	1.6 4.5 7.1	8.4 11.4 14.5	4 4 4 4 7.	2.8.8.9.4.8.	2.5 1.3 0.3	2.2.2 2.2.2 3.2.2	0.2 1.0 1.6
		Doctor's (e	(except 1st professional)	ofessional)					
1956–57	8.756 18,800 38,700	47.2 51.2 54.6	2.8 6.0	6.8 14.1 19.8	19.1 16.7 15.2	12.6 11.5 10.3	4.0 3.2 2.8	1.8	0.1 0.1

B. Social sciences, humanities, and related propessions

ERIC

The second secon

Year	Total number of	Total social sciences	Fine arts*	Philosophy and	English and	Foreign languages ¹⁰	Psychology	Social sciences ¹¹	Education	Library sciences	Social	Cther ¹³
(1)	degrees (2)	and humanities (3)	(4)		Journansm (6)	(2)	(8)	(6)	(10)	(11)	(13)	(13)
				Bachelor's	and 1st professional	fessional						
1056-57	340,347	71.8	8.8	1.9	5.3	1.3	1.8	12.6	18.2	0.5	9.0	23.9
1066_67 6	574,000	74.7	5.5	1.7	7.6	2.9	2.9	16.4	17.8	0.5	2.0	18.6
1976-77	970,000	75.1	5.1	1.4	9.6	4.5	3.7	19.1	16.7	0.5	1.0	13.6
				Master's (exc	cept 1st professional	essional)						
105657	61 955	8.77	6. 3.	1.3	3.6	1.4	1.8	7.6	45.5	0.3	0.1	9.7
1980-01	132,900	71.7	5.9	6.0	5.1	2.9	2.6	6.6	32.5	6.0	0.4	10.6
1976-77	247,800	62.9	5.0	8.0	6.5	3.8	3.0	11.8	22.0	1.4	0.7	10.9
			Ι	Doctor's (exce	ept 1st professional)	essional)						
1956-57	8.756	52.8	3.4	2.3	4.0	2.5	6.3	12.9	16.4	0.1	0.2	4.8
1066-67 6	18.800	48.8	4.	2.0	4.1	2.6	6.0	12.1	13.9	0.1	0.3	4.4
1976-77	38,700	45.4	3.6	2.3	4.1	2.3	5. 8.	11.0	11.9	0.1	0.4	4.0

1 SOURCES: U.S. Department of Health, Education, and Welfare. Office of Education publications on "Earned Degress Conferred by Institutions of Higher Education" (1956-57 through 1963-64) and unpublished data for 1964-65.

2 Includes mathematics, statistics, and computer systems.

3 Includes astronomy, chemistry, earth sciences, meteorology, physics, and other physical sciences.

4 Includes anatomy, bacteriology, biochemistry, biology, bottany, entomology, physiology, zoology, and other biological

sciences.
Includes dentistry, medicine and osteopathy, nursing, optometry, pharmacy, public health, veterinary medicine, and other health professions.

other Slavic languages, and other languages and language 10 Includes classical languages, French, German, Russian, programs.

11 Includes anthropology, economics, geography, history, international relations, political science, public administration, sociology, and other social sciences.

7 The projection of degrees by subject field is based on the assumption that the percentage distribution of degrees by field for each level and sex, in the United States and outlying areas (appendix table I), will continue the 1956-57 to 1964-65 trends.

• Estimated.

For methodological details, see appendix table B; for complete classification of degrees by field, see appendix

⁹ Includes philosophy, scholastic philosophy, religious education and Bible, and other religious fields.

* Includes architecture, music, speech and dramatic arts,

and other fine and applied arts.

table J.

military, naval, or Air Force science; theology; and miscel-12 Includes business and commerce; home economics; law; laneous and unclassified fields.

NOTE.-Data are for United States and outlying areas. Because of rounding, detail may not add to totals.

TABLE 20.—Earned bachelor's and first-professional degrees, by field: United States and outlying areas, 1956-57 to 1976-77 1

IENCES AND RELATED PROFESSIONS
AND RELATED
A. NATURAL SCIENCES A.
A. NATUR

Year (1)	Total (2)	Mathematics and statistics ² (3)	Engineering (4)	Physical sciences: (5)	Biological sciences ⁴ (6)	Agriculture and forestry (7)	nealth professions ⁶ (8)	Science, general ;rrogram (9)
1956-57	95,993	5,546	31,211	12,934	13,868	7,943	23,075	1,416
1957–58	105,143	6,924	35,332 38 134	14,352 15.460	14,408 15.149	8,512	24,288	1,932
1958–59	115,213	11.437	37,808	16,057	15,655	7,596	24,557	2,151
1959-60	114.296	13,127	35,866	15,500	16,162	6,822	24,798	2,021
1904-01	116.228	14,610	34,735	15,894	17,014	6,862	24,821	2,292
1907-02	120,523	16,121	33,458	16,276	19,218	7,016	25,914	2,520
1902-09-1	129,429	18,677	35,226	17,527	22,827	7,158	25,424	2,590
1909-0-8	137,675	19,668	36,795	17,916	25,305	7,705	27,519	2,767
1904-00.	136,600	21,190	7 35,830	18,020	25,680	6,900	25,400	2,580
1966-67 6	145,470	24,330	37,310	19,460	28,080	6,640	26,920	2,730
		PROJECTED 8	ED 8					
	171 460	30,740	42.650	23,300	33,400	7,410	30,060	3,900
1967-68	187,880	36,110	45,340	25,550	37,410	7,240	31,550	4,280
1908-09	186,750	37,850	43,740	26,220	37,970	6,760	29,950	4,260
1909-10	189,990	40,880	43,390	26,590	39,380	6,410	29,020	4,320
19(0-(1	197,310	44,890	43,990	27,990	41,180	5,740	28,580	4,940
19(1-(6-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	206,230	49,400	44,340	29,630	44,350	5,500	27,850	5,160
19/2-19	215,660	54,540	44,960	31,540	46,910	4,780	27,520	5,410
1910-14	225,220	59,740	45,700	33,330	49,870	3,950	26,990	5,640
19/4-/D	234,320	64,580	45,730	35,090	52,769	3,570	26,210	6,380
19/5-/0	2006101		. !		007	000	97 130	6.590

B. SOCIAL SCIENCES, HUMAN, MES, AND RELATED PROFESSIONS

Year (1)	Total	Fine arts* (3)	Philosophy and religion ¹⁰ (4)	English and journalism (5)	Foreign languages ¹¹ (6)	Psychology (7)	Social sciences ¹² (8)	Education (9)	Library science (10)	Social work (11)	Other ¹⁴ (12)
1956–57 1957–58 1958–59 1959–60 1960–61 1961–62 1962–63 1964–65 1965–66 ⁶	244, 354 260, 605 272, 932 279, 628 287, 488 304, 257 330, 069 372, 675 401, 255 403, 400 428, 530	19,602 20,832 21,595 22,234 21,908 23,383 25,346 28,208 30,411 30,360 31,730	6,605 7,016 6,975 7,284 7,432 7,581 8,013 8,831 8,831 8,220 9,220	17,998 19,235 20,767 22,456 24,049 26,587 30,357 35,318 39,021 40,500 43,830	4,322 4,503 4,767 5,518 6,538 8,038 9,868 12,365 14,105 15,110	6,191 6,930 7,383 8,111 8,524 9,638 11,062 13,359 14,771 15,120	42,963 47,011 48,574 50,516 52,717 57,779 65,887 77,613 84,904 86,950 93,870	61,840 65,571 69,987 71,520 74,865 78,610 83,165 91,389 96,387 96,340	1,542 1,690 1,756 1,938 2,000 2,042 2,351 2,532 2,880 2,880 3,040	1,901 1,994 2,069 2,259 2,634 3,075 3,468 4,039 4,039 4,190	81,390 85,823 89,059 87,442 86,942 87,965 90,945 105,975 106,560
			FR	ROJECTED 8	8						
1967–68 1968–69 1969–70 1970–71 1971–72 1972–73 1973–74 1975–76	506,540 557,120 555,250 566,010 587,690 615,770 647,340 676,780	37,550 41,030 39,860 46,400 41,220 43,270 45,100 46,340 47,330	11,250 11,900 11,840 12,030 12,130 12,190 12,780 12,930 13,420	53,190 60,600 61,820 64,220 68,160 73,550 78,470 84,010 89,760 93,120	20,890 24,400 25,720 27,300 29,540 32,250 35,053 38,480 41,900 43,480	20,460 22,910 23,980 24,850 26,580 28,650 31,050 33,330 34,640	112,910 126,310 127,960 132,910 140,710 149,380 159,830 169,570 179,010	119,480 130,170 128,300 130,120 134,210 139,820 145,520 151,190 150,160	3, 610 3, 990 3, 980 4, 080 4, 250 4, 130 4, 340 4, 750 4, 750	5,360 5,900 5,890 6,350 6,610 6,940 7,790 8,160 8,910 9,240	121,840 129,910 125,900 123,750 124,280 125,590 127,410 128,210 127,810 131,630

See footnotes at end c'table 22.

Table 21.—Earned master's (except first-professional) degrees, by field: United States and outlying areas, 1956-57 to 1976-77 1

A. NATURAL SCIENCES AND RELATED PROFESSIONS

1965-67 1966-67 1966 1	Year (1)	Total	Mathematics and statistics? (3)	Engineering (4)	Physical sciences* (5)	Biological sciences*	Agriculture and forestry (7)	Health rofessions ⁶ (8)	Science general program (9)
15,291 1,234 5,788 3,034 1,852 1,480 1,686 18,285 1,509 6,753 3.202 2,007 1,683 1,782 18,285 1,509 6,783 3.202 2,007 1,681 20,307 2,238 8,178 3,799 2,358 1,602 1,646 21,417 3,238 8,178 3,799 2,358 1,602 1,646 22,247 2,680 8,909 3,929 2,642 1,763 2,024 24,117 3,239 10,827 4,567 3,297 1,651 2,299 30,144 4,294 12,056 4,918 3,604 1,734 2,830 31,460 5,220 113,990 5,410 4,570 1,770 2,980 32,400 5,960 15,130 5,810 4,570 1,770 2,980 43,160 7,370 17,760 6,320 1,570 4,100 52,600 10,970 24,810 8,760 6,320 1,670 4,100 52,060 10,970 22,480 8,800 7,440 1,320 4,100 63,200 13,750 29,210 9,840 7,920 1,000 4,550 74,370 16,710 13,200 11,120 8,330 7,70 4,980 84,610 17,710 34,049 11,720 9,310 7,70 4,980 84,610 17,710 34,049 11,720 34,100 2,980 84,610 17,710 34,049 11,720 3,140 7,020 84,610 17,710 34,049 11,720 3,190 4,180 84,610 17,710 34,049 11,720 9,310 7,00 4,580 84,610 17,710 34,049 11,720 9,310 7,00 4,580 84,610 17,710 34,049 11,720 9,310 7,00 4,580 84,610 17,710 34,049 11,720 9,310 7,00 4,580 84,610 17,710 34,049 11,720 9,310 7,00 4,580 84,610 17,710 34,049 11,720 9,310 7,00 4,580 84,610 17,710 34,049 11,720 9,310 7,00 4,580 84,610 17,710 34,049 11,720 9,310 7,00 4,580 84,610 17,710 14,720 11,720 11,720 11,720 11,720 11,720 84,610 17,710 14,720 11,720	1056_57	13.733	965	5.233	2,704	1,801	1,549	1,385	96
17,168 1,509 6,753 3,202 2,007 1,564 1,782 18,285 1,765 7,159 3,387 2,154 1,554 1,654 22,247 2,680 8,909 3,929 2,642 1,763 1,661 24,117 3,333 9,635 4,132 2,921 1,546 2,024 24,117 3,333 9,635 4,132 2,921 1,546 2,024 24,117 3,333 9,635 4,132 2,921 1,546 2,024 30,144 4,244 10,827 4,918 3,604 1,734 2,530 34,850 5,220 13,990 5,470 4,380 1,770 2,980 37,600 5,950 15,130 5,810 4,770 1,770 2,980 43,160 7,370 7,370 7,780 6,300 4,770 1,540 1,540 3,140 25,800 10,970 21,690 7,380 6,310 1,730 3,800 26,800 10,970 24,810 8,760 6,320 1,670 4,160 26,200 13,750 22,010 9,840 7,320 1,900 4,310 69,200 13,750 29,210 0,840 7,320 1,000 4,550 89,170 15,230 11,730 9,200 7,440 1,320 4,550 89,170 16,730 11,730 8,330 770 4,980 89,170 17,710 36,040 11,730 3,300 770 4,980 89,170 17,710 36,040 11,730 9,310 770 4,980 89,170 17,710 36,040 11,730 9,310 770 4,980 89,170 17,710 36,040 11,730 9,310 770 4,980 89,170 17,710 36,040 11,730 9,310 770 4,980 89,170 17,710 36,040 11,730 9,310 770 4,980 89,170 17,710 36,040 11,730 9,310 770 4,980 89,170 17,710 36,040 11,730 9,310 770 4,980 89,170 17,710 36,040 11,730 9,310 770 4,980 89,170 17,710 36,040 11,730 4,980 770 4,980 89,170 17,710 36,040 11,730 4,980 770 4,980 89,170 17,710 16,170 11,73	1047-58	15.291	1.234	5,788	3,034	1,852	1,480	1,680	223
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1958-59	17,168	1,509	6,753	3,202	2,001	1,563	1,782	352
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1959-60	18,285	1,765	7,159	3,387	2,154	1,554	1,872	394
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1560-61	20,307	2,238	8,178	3,799	2,358	1,602	1,646	486
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1961-62	22,247	2,680	8,909	3,929	2,645	1,763	1,651	673
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1962-63	24,117	3,323	9,635	4,132	2,921	1,546	2,024	536
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1963-64	26,960	3,603	10,827	4,567	3,297	1,651	2,299	216
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1964-65	30,144	4,294	12,056	4,918	3,604	1,734	2,530	1,008
PROJECTED * PROJECTED * PROJECTED * PROJECTED * 19,040 6,370 15,970 6,000 4,720 1,610 2,960 4,710 1,730 3,140 1,730 1,730 21,690 7,830 6,310 1,730 3,800 10,970 24,810 8,760 6,920 1,670 4,170 1,550 4,160 1,64,970 12,660 27,190 9,800 7,440 1,320 4,210 64,970 12,660 27,190 9,840 7,920 1,000 4,310 64,310 16,780 11,720 10,480 8,216 1,000 4,550 80,170 16,780 11,730 9,310 770 4,980	1965-66	34,850	5,220	7 13,990	5,470	4,390	1,760	2,830	1,190
PROJECTED 8 39,040 6,370 15,970 6,000 4,720 1,610 2,960 43,160 1,540 3,140 10,370 24,810 8,760 6,920 1,170 1,670 4,070 6,920 1,670 32,400 1,570 17,100 1,570 1,100 1,570 4,100 64,970 12,660 25,130 7,440 1,320 4,100 69,200 13,750 29,210 9,840 7,920 1,090 4,310 17,410 16,780 84,140 11,120 8,830 770 4,720 4,720 11,730 34,140 11,120 8,830 770 4,980	1966-67	37,600	5,950	15,130	5,810	4,570	1,770	2,980	1,390
PROJECTED 8 PROJECTED 8 PROJECTED 8 99,040 6,370 15,970 6,000 4,720 1,610 2,960 4,710 1,540 3,140 1,540 1,540 3,140 1,540 1,610 1,540 3,140 1,600 59,690 10,970 24,810 8,760 6,920 1,670 4,070 64,970 12,660 27,190 9,200 7,440 1,320 4,210 69,200 13,750 29,210 9,840 7,920 1,090 4,310 1,74,370 15,230 31,420 10,480 8,210 1,000 4,550 84,610 17,710 36,049 11,730 9,310 770 4,980									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			PROJECTE	ξD 8					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1967_68	39.040	6.370	15,970	6,000	4,720	1,610	2,960	1,410
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	CS-8961	43,160	7,370	17,760	6,530	5,190	1,540	3,140	1,630
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1969-70	52,770	9,290	21,690	7,830	6,310	1,730	3,800	2,120
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1970-71	59,690	10,970	24,810	8,760	6,920	1,670	4,070	2,490
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1971–72	61,630	11,600	25,630	8,860	7,110	1,550	4,160	2,720
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1972-73	64,970	12,660	27,190	9,200	7,440	1,320	4,210	2,950
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1973-74	69,200	13,750	29,210	9,840	7,920	1,090	4,310	3,080
80,170 $16,780$ $34,140$ $11,120$ $8,830$ 730 $4,720$ $84,610$ $17,710$ $36,0.9$ $11,730$ $9,310$ 770 $4,980$	1974-75	74,370	15,230	31,420	10,480	8,210	1,000	4,550	3,480
$84,610$ $17,710$ 36_{2} 0.49 $9,310$ 770 $4,980$	1975-76	80,170	16,780	34,140	11,120	8,830	730	4,720	3,850
	1976-77	84,610	17,710	36°049	11,730	9,310	220	4,980	4,070

B. SQCIAL SCIENCES, HUMANITIES, AND RELATED PROFESSIONS

Year (1)	Total (2)	Fine arts ⁹ (3)	Philosophy and religion ¹⁰ (4)	English and ournalism (5)	Foreign languages ¹¹ (6)	Psychology (7)	Social sciences ¹² (8)	Education (9)	Library science (10)	Social work (11)	Other ¹²
1956–57 1957–58 1953–59 1953–60 1960–61 1962–63 1962–63 1962–65 1965–66 6	48; 222 50, 323 52, 416 56, 212 57, 962 62, 642 67, 301 74, 162 82, 051 91, 350 95, 300	4,004 4,158 4,478 4,809 4,804 5,182 5,620 6,020 6,821 7,600 7,90	808 792 940 919 809 898 810 1,020 1,160 1,160	2,255 2,532 2,804 3,192 3,391 3,765 4,807 4,807 5,461 6,260 6,790	880 1,044 1,077 1,165 1,416 1,637 2,035 2,400 2,957 3,440 3,790	1.095 1,235 1,235 1,406 1,719 1,832 1,918 2,059 2,708 3,100 3,400	4,701 5,219 5,544 5,965 6,378 7,241 8,326 9,402 10,639 12,250 13,220	28, 211 28, 223 28, 598 30, 424 30, 830 32, 654 34, 115 37, 186 39, 296 42, 650 43, 250	198 157 205 305 370 521 474 695 954 1,060 1,150	33 124 149 239 205 320 318 393 377 540	6,037 6,838 7,356 7:788 8,040 8,592 9,378 10,253 11,818 13,350
			PR	PROJECTED	8 (
1967–68 1968–69 1970–71 1971–72 1972–73 1973–74 1974–75	95,760 102,240 121,030 133,110 132,970 135,630 140,600 147,430 154,730	7,900 8,270 9,810 10,590 10,600 10,640 11,330 11,330 11,840	1,180 1,270 1,520 1,520 1,560 1,560 1,640 1,830 1,830	7,130 7,850 9,690 11,020 11,470 2,050 12,980 14,090 15,280	3,950 4,490 5,460 6,350 6,950 7,460 8,170 8,850 9,330	3,440 3,860 4,660 5,370 5,480 5,840 6,110 6,680 7,140	13,700 15,080 18,220 20,740 21,350 22,410 23,880 25,700 27,700	42,230 43,870 50,380 51,920 51,030 51,040 51,290 51,670 54,480	1,250 1,390 1,870 2,130 2,260 2,380 2,620 2,980 3,280 3,460	620 660 910 1,070 1,170 1,220 1,450 1,590 1,680	11,360 15,500 18,510 20,690 20,840 21,600 22,699 24,010 25,550

See footnotes at end of table 22.

-professional) degrees, by field: United States and outlying areas, 1956-57 to 1976-77 1

Table 22.—Earned doctor's (except just-projessional) were A. Natural sciences	Jaberprojesscomel, wegree A. Natural sciences		AND RELATED PROFESSIONS	SIONS				
Year (1)	Total	Mathematics and statistics ² (3)	Engineering (4)	Physical sciences; (5)	Biological sciences ⁴ (6)	Agriculture and forestry (7)	Health professions ⁴ (8)	Science, general program (9)
					,	3	1	n
in the second se	4.130	249	596	1,674	1,103	353	061	ဂ
1800-07	4,174	247	647	1,655	1,125	353	147	0
1957-58	4 400	282	714	1,812	1,045	388	153	9
1938-59	4,400	303	786	1,838	1,205	456	101	2
1959-60-	4,031	34	943	1,991	1,193	463	133	က
1960-61	0,010 F 664	306	1 207	2,122	1,338	472	148	-
196162	£00.0	060	1,20	0 380	1 455	462	157	4
1962-63	6,326	450	1,076	000,4	1,100	777	102	-
1069 64	7,137	596	1,693	7,400	1,020	0.70	761	٠ <u>١</u>
2007-03:	8,316	688	2,124	2,829	1,928	557	173	ZT ,
[904-00]	8,890	770	7 2,350	2,960	2,030	580	180	0.1
111111111111111111111111111111111111111	0,000	860	2,650	3,140	2,160	009	190	20
1966-67 %	6,0		•					
		PROTECTED 8	RD 8					
		FROJECT						
	10.840	066	3,110	3,490	2,370	670	190	20
1967–68	12,330	1.150	3,640	3,880	2,670	730		30
1968-69		1.240	3,980	4,040	2,750	770		30
1959-70		1,310	4,140	3,990	2,740	740		30
1970-71		1,430	4,620	4,240	2,920	800		30
1971-72	1.7	1,770	5,710	5,000	3,460	920		40
1972–73	19, 190	2,000	6,630	5,550	3,770	1,030	170	40
102. δ−7 (4) - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	19,470	2,090	6,880	5,510	3,780	1,000		40
19/4-(D. 1111-111-111-111-111-111-111-11-11-11-1	20,170	2,220	7,310	5,600	3,820	1,030	150	40
1976-77	21,130	2,330	7,660	5,870	4,000	1,080	150	40

B. Social science, humanities, and related professions

1956-57	(9)				201010	404	
4,626 300 198 4,768 292 222 4,960 359 206 5,132 380 233 5,505 410 263 5,938 425 251 6,496 467 267 7,353 519 285 8,151 545 304 8,151 545 304 8,151 545 304 8,151 545 330 9,180 640 370 11,360 790 470 11,760 860 520 11,760 860 520 12,590 950 590 14,920 1,140 700 16,310 1,270 800		(2)	(8)	(0)	(10)	(11)	(12)
4,768 292 222 4,960 359 206 5,132 380 233 5,132 380 233 5,505 410 263 6,496 425 251 6,496 467 267 7,353 519 285 8,151 545 304 8,161 570 330 9,180 640 370 11,360 710 410 11,760 860 520 11,760 860 520 11,760 950 550 11,760 11,260 770 16,310 1,260 770 16,330 1,270 800			1,127	1,432	6	18	423
4,960 359 206 5,132 380 233 5,505 410 263 6,496 467 267 6,496 467 267 7,353 519 285 8,151 545 304 8,610 570 330 9,180 640 370 11,360 710 410 11,360 770 470 11,492 11,146 700 14,920 1,146 700 16,330 1,270 800			1,144	1,529	19	18	413
380 233 410 263 425 251 467 267 519 285 545 304 570 330 640 370 710 410 790 470 860 520 860 520 950 590 1,140 700 1,260 770			1,208	1,487	9	30	406
410 263 425 251 467 267 519 285 545 304 570 330 640 370 PROJ 710 410 710 410 790 470 860 510 860 520 950 520 950 520 11,140 700 11,260 770 11,260 800	105 232	2 641	1,282	1,474	19	23	443
425 251 467 267 519 285 545 304 570 330 640 370 PROJ 710 410 790 470 860 510 860 520 950 520 950 520 11,140 700 11,260 770			1,369	1,594	14	36	444
467 267 519 285 545 304 570 330 640 370 710 410 790 470 860 520 860 520 950 590 1,140 700 1,260 770			1,391	1,737	10	32	557
519 285 545 304 570 330 640 370 710 410 790 470 860 520 860 520 950 590 1,140 700 1,260 770			1,557	1,943	17	40	557
545 304 570 330 640 370 710 410 790 470 860 520 860 520 950 590 1,140 700 1,260 770			1,803	2,191	13	43	611
570 330 640 370 710 410 790 470 860 510 860 520 950 590 1,140 700 1,260 770		_	2,027	2,372	12	34	711
640 370 PROJ 710 410 790 470 860 510 860 520 950 590 1,140 700 1,260 770		_	2,130	2,480	20	50	160
PROJ 710 410 790 470 860 510 860 520 950 590 1,140 700 1,260 770 1,270 800	-	0 1,130	2,270	2,620	20	20	820
710 410 790 470 1 860 510 1 860 520 1 950 590 1 1,140 700 1 1,260 770 1 1,270 800 1	TED 8						
790 470 1 860 510 1 860 520 1 950 590 1 1,140 700 1 1,260 770 1				2,880	20	70	910
860 510 1 860 520 1 950 590 1 1,146 700 1 1,260 770 1 1,270 800 1				3,170	20	70	1,000
860 520 1 950 590 1 1,140 700 1 1,260 770 1 1,270 800 1				3.280	20	80	1,050
950 590 1 1,140 700 1 1,260 770 1 1,270 800 1				3,240	20	80	1,050
1,140 700 1 1,260 770 1, 1,270 800 1				3,420	20	08	1,110
1,260 770 1				,020	30	110	1,320
1.270 800 1				4,390	30	120	1,430
		ેલ	3,940	4,350	30	120	1,440
1.320 830 1	510 840			4,400	30	140	1,480
1,380 880 1		ัญ	4.240	4,610	30	140	1,560

SOURCES; U.S. Department of Health, Education, and Welfare, Office of Education publications on "Earned Degree" Conferred by Institutions of Higher Education" (1956-57

mathematics, statistics, and computer systems. Conferred by Institutions of Higher Education" (1 through 1963-64) and unpublished data for 1964-65.
2 Includes mathematics, statistics, and computer standings astronomy, chemistry, earth sciences, is

 Includes astronomy, chemistry, earth sciences, metero-ology, paysics, and other physical sciences.
 Includes anatomy, bacteriology, biochemistry, biology, botany, entomology, physiology, zoology, and other biological

Includes dentistry, medicine and oetcopathy, nursing, cptometry, pharmacy, public health, veterinary medicine, and other health professions.

*Estimated.

7 Engineering degrees awarded in 1965-66 were received too late for inclusion in the tables. They were as follows:

Bachelor's 35,815

2,303 13,677 Master's Doctor's

· The projection of degrees by subject field is based on the assumption that the percentage distribution of degrees by field for each level and sex, in the United States and outlying areas (appendix table I), will continue the 1955-56 to 1964-65trends.

For mothodological details, see appendix table B; for complete classification of degrees by field, see appendix table J.

9 Includes architecture, music, speech and dramatic arts,

and other fine and applied arts.

10 Includes philosophy, scholastic philosophy, religious education and Bible, and other religious fields.
11 Includes classical languages, Fronch, German, Russian, other Slavic languages, and other Innguages and language

programs.

12 Includes anthropology, economics, feography, history,

international relations, political science, public administra-tion, sociology, and other social sciences.

13 Includes business and commerce; home economics; law;

military, naval, or Air Force science; theology; and miscelance and unclassified fields.

NOTE. -- Data are for United States and outlying areas. Because of rounding, detail may not add to totals.

Chapter III

Teachers

Alice R. Pool and Linda E. Gibson

Classroom teachers in regular elementary and secondary day schools

The number of classroom teachers in public and nonpublic elementary and secondary schools rose from 1,354,000 in fall 1956 to 2,019,000 in fall 1966, and is expected to be 2,292,000 by fall 1976. These numbers for 1966 and 1976 include the additions resulting from the Elementary and Secondary Education Act of 1965. This Act is expected to account for an increase in the number of teachers employed in the public schools of about 70,000 in 1967; 80,000 in 1968; and 90,000 each year from 1969 through 1976. Of the increased number, 37 percent are expected, on the basis of 1966 experience, to be elementary teachers and 63 percent to be secondary teachers.

Projected classroom teachers by control and level of school are shown in table 23. The projections of teachers employed in public schools shown in section A of the table include the additional number of teachers expected as the result of the operation of the Elementary and Secondary Education Act. The projections in section B are based on the assumption that, in the absence of the Act, the 1956-1964 trend of pupil-teacher ratios would have continued to 1976. These projections were made by dividing enrollments projected by control and level of school (table 3) by the corresponding projected pupil-teacher ratios in section B of table 24.

The number of classroom teachers in public and nonpublic secondary schools increased from 499,000 in 1956 to 857,000 in 1966 and is expected to be 1,104,000 in 1976. In the elementary schools, the number of classroom teachers increased from 854,000 in 1956 to 1,162,000 in 1966 and is expected to be 1,188,000 in 1976. The number of secondary school teachers is increasing at a faster rate than elementary school teachers because of a larger enrollment-rate increase and a lower pupil-teacher ratio in the secondary schools, and because of the shift of public seventh- and eighth-grade pupils from the elementary into the secondary schools. The number of secondary school teachers in 1966 was 72 percent greater than in 1956, while the increase in the number of elementary school teachers for the same period was 36 percent.

About 85 percent of the elementary and 90 percent of the secondary school teachers were in public schools in 1966 and these percentages are expected to continue through 1976. The number of public school teachers increased from 1,199,000 in 1956 to 1,788,000 in 1966 and is expected to be 2,018,000 in 1976. As previously stated, these numbers include 70,000 in 1967 and 90,000 in 1976 as the estimated additions resulting from the operation of the Elementary and Secondary Education Act. Nonpublic school teachers increased from 155,000 in 1956 to 231,000 in 1966 and are expected to be 274,000 in 1976.

Public and nonpublic school pupil-teacher ratios on which the teacher projections are based are shown in table 24. The public elementary school pupil-teacher ratio decreased from 29.6 in 1956 to 27.0 in 1966 and is expected to be 25.1 in 1976. Without the benefits of the Elementary and Secondary Education Act of 1965 the ratio projected on the basis of the 1956-1964 trend (section B) would have been 26.0 in 1976. The public secondary school pupil-teacher ratio increased slightly between 1956 and 1964 (from 21.2 to 21.4) but under the operation of the Elementary and Secondary Education Act is expected to drop to 20.2 by 1976.

Nonpublic school pupil-teacher ratios are higher than public in the elementary division and lower than public in the secondary division. The nonpublic elementary school pupil-teacher ratio decreased from 38.9 in 1956 to 33.1 in 1966, and based on this trend is expected to drop to 26.1 by 1976. The nonpublic secondary school pupil-teacher ratio increased from 16.5 in 1956 to 17.5 in 1966, and is expected to remain at approximately this level through 1976.

Demand for additional classroom teachers

The demand for public elementary and secondary school teachers not employed in the public schools in the previous year includes those needed to allow for increased enrollment, replacement of teachers with substandard credentials, and replacement of teachers leaving the profession (turnover). The demand for

additional public school teachers (including returnees to the profession) to take care of all of these needs was 961,000 in the fall 1962 through 1966 period; it would be expected to be 883,000 in 1967 through 1971, and 803,000 in 1972 through 1976 on the basis of trend alone. Allowance for the expected impact of the Elementary and Secondary Education Act of 1965, however, will increase these totals to 944,000 and 840,000, respectively. This means that 1.8 million new teachers or returnees to the profession will be employed by the public schools during the next 10 years, 1967 through 1976. The largest number is required for turnover, which will account for over 85 percent of this demand.

The projected demand for additional public school teachers is shown in table 25. The number of teachers necessary to take care of enrollment increases was computed for each year as the difference between the total employed for the current year and the total employed for the previous year. The number for turnover was based on the assumption that 8 percent of the total classroom teachers will leave the profession temporarily or permanently each year, and the number for replacement of teachers with substandard certificates was based on the assumption that teachers with substandard certificates would be reduced 220 per year, the average for the 1962 through 1966 period. Projection A includes the increases in classroom teachers due to the Elementary and Secondary Education Act.

The future demand for additional nonpublic school teachers is expected to be smaller than in the past 5 years because enrollment increases are expected to be smaller. About 78,000 new nonpublic school teachers or returnees to the profession were employed during fall 1962 through fall 1966. This number is expected to be about the same in 1967 through 1971, and to drop to 68,000 in 1972 through 1976. Approximately 145,000 additional nonpublic school teachers will be employed during the next 10 years, 1967 through 1976. Turnover will account for 70 percent of this demand.

The projected demand for additional nonpublic elementary and secondary school teachers is shown in table 26. The number for taking care of enrollment increases was computed in the same manner as for public schools, and the number for turnover is based on the assumption that 4 percent (one-half the public school rate) of the nonpublic school teachers leave the profession permanently or temporarily each year. This lower rate (4 percent) was assumed because about one-half of all nonpublic school teachers belong to religious orders where the turnover is presumably small.

Instructional staff in elementary and secondary schools

The instructional staff in public elementary and secondary schools increased from 1.3 million in 1956 to 2.0 million in 1966. It is expected to be 2.2 million in 1976 based on the 1955-1964 trend, and 2.3 million under projection A, table 27. These figures include principals, supervisors, librarians, and guidance and psychological personnel, as well as classroom teachers. Instructional staff and classroom teachers are not reported separately for nonpublic schools. It is believed that the primary responsibility of most professional personnel employed by these schools is classroom teaching; therefore, the number of instructional staff in nonpublic schools shown here is the same as the number for nonpublic school teachers.

Projected instructional staff is shown in table 27. Section A includes the expected effects of the Elementary and Secondary Education Act of 1965. It is expected that the Act will produce an increase in instructional staff in regular public day schools over the number expected on the basis of trend alone (section B). This increase is expected to be about 80,000 in 1967; 90,000 in 1968; and 100,000 each year from 1969 through 1976.

The public school instructional staff projection in section B is based on the assumption that instructional staff as a percentage of classroom teachers will continue the 1955-1964 trend. The ratio of total public school instructional staff to classroom teachers increased from 107.5 in 1956 to 110.5 in 1966 and based on trend alone would be expected to be 113.7 by 1976. These ratios were applied to the public classroom teacher figures shown in table 23 to obtain the projections in section B. Nonpublic school instructional staff was assumed to be 100 percent of the classroom teachers shown in table 23.

Total instructional stan for resident degree-credit courses in institutions of higher education

The total instructional staff for resident degree-credit courses in institutions of higher education increased from 250,000 in 1956-57 to an estimated 461,000 in 1966-67, and is expected to be 662,000 in 1976-77. These figures include all full-time and part-time instructors and above, plus junior instructional staff employed for instruction in resident degree-credit courses. The junior instructional staff includes assistant instructors, teaching fellows, teaching assistants, and laboratory assistants.

Projected total instructional staff is shown in table 28. This projection is based on the assumption that total degree-credit enrollment (appendix table F) will increase to approximately 9 million by fall 1976 and that the student-staff ratio will continue to increase as it has in the past from 11.8 in 1956-57 to

¹ Frank Lindenfeld, U.S. Department of Health, Education, and Welfare, Office of Education, "Teacher Turnover in Public Elementary and Secondary Schools, 1959-60."

an estimated 13.0 in 1966-67, and to 14.3 by 1976-77. It is assumed that the percentage of total instructional staff employed as full-time instructor or above, as part-time instructor or above, and as junior instructional staff, will remain constant to 1976 at the 1963-64 levels of 57.1, 28.2, and 14.7, respectively.

Full-time equivalent instructional staff for resident degree-credit courses increased from 180,000 in 1956-57 to an estimated 328,000 in 1956-67 and is expected to rise to 471,000 in 1976-77. These figures include full-time staff and the full-time equivalent of part-time instructors or above, plus the full-time equivalent of junior instructional staff. In 1963-64, about 80 percent of the full-time equivalent instructional staff members were employed on a full-time basis with the rank of instructor or above.

Projected full-time equivalent instructional staff for resident degree-credit courses is shown in table 29. This projection is based on the assumption that the full-time equivalent of part-time staff employed as instructors or above will remain at the 1963-64 level of 33 percent, and that this same percent will apply to total junior instructional staff for which the full-time equivalent is not reported. Projected part-time instructor or above and projected junior instructional staff (table 28) were multiplied by this percentage to obtain the projected full-time equivalents shown in table 29.

Total professional staff in institutions of higher education

Total full-time and part-time professional staff in institutions of higher education includes, in addition to staff for instruction in resident degree-credit courses, full-time and part-time instructional staff employed for extension courses, resident nondegree-credit courses, and instruction by mail, radio, or television. It also includes full-time and part-time professional staff employed for administration and services, and for organized research. Full-time and part-time professional staff in institutions of higher education rose from 365,000 in 1956-57 to an estimated 701,000 in 1966-67, and is expected to be 1,006,000 in 1976-77

Projected full-time and part-time professional staff is shown in table 30. It is based on the assumption that full-time and part-time professional staff other than that for instruction in resident degree-credit courses, as a percentage of total full-time and part-time instructional staff for resident degree-credit courses, will maintain to 1976-77 the same relationship that existed in 1963-64. These percentages were 17.3 for other instructional staff, 16.4 for administration and services, and 18.2 for organized research.

The estimated and projected full-time equivalent of total full-time and part-time professional staff is shown in table 31. The method of estimating and projecting full-time equivalent instructional staff for resident degree-credit courses is given in the footnotes to table 29. The 1963-64 ratio of full-time equivalent instructional staff to total full-time and part-time instructional staff for resident degree-credit courses was 0.71. The totals for full-time and part-time staff employed for instruction in courses other than resident degree-credit courses and for administration and services, shown in table 30, were multiplied by the above ratio to obtain the full-time equivalents for this staff c ven in table 31.

The estimation through 1966-67 of full-time equivalent of total full-time and part-time staff for administration and services was also based on this ratio. The projection from 1967-68 to 1976-77 of full-time equivalent staff for organized research was based on the average increase per year in this staff from 1960-61 to 1966-67. The average annual increase of 5,000 was held constant to 1976-77.

Demand for instructional staff in institutions of higher education

The demand for additional full-time equivalent instructional staff in institutions of higher education is expected to continue to increase during the next 10 years, 1967-68 through 1976-77. During the past 5 years, 1962-63 through 1966-67, the demand for additional full-time equivalent instructional staff was 213,000. It is expected to be 211,000 in 1967-68 through 1971-72 and 234,000 in 1972-73 through 1976-77. These figures include the number needed for both increased enrollment and replacement of staff leaving the profession temporarily or permanently each year. The instructional staff includes those employed for extension courses, resident nondegree-credit courses, and instruction by mail, radio, or television, as well as the instructional staff for resident degree-credit courses.

The projected demand for additional full-time equivalent instructional staff is shown in the last three columns of table 32. It is based on the estimated and projected full-time equivalent instructional staff, and is projected as the total of staff required for increased enrollment and for replacement of those who have left the profession either temporarily or permanently. Full-time equivalent staff required for increased enrollment is computed as the difference between the total number employed in successive years. The requirements for replacement are estimated at 6 percent of the total number employed in the previous year.

It should be noted that one of the basic assumptions underlying the demand for instructional staff shown here is that the student-staff ratios will continue to increase until 1976-77. Any reversal of this trend will result in larger demands for instructional staff than those presented here.

The assumption of a 6-percent replacement rate is based on unpublished data from a 1963 Office of Education study which showed that about 5 percent of the full-time instructors and above in 4-year



institutions intended to leave employment in institutions of higher education during the following year. If we estimate an additional 1 percent for mortality, the annual replacement rate is then 6 percent. If the requirement for replacement should be lower or higher than the assumed 6 percent per year, the demand for replacement of instructional staff would be altered somewhat.

Demand for professional staff in institutions of higher education

The professional staff in institutions of higher education includes in addition to instructional staff, staff employed for general administration and services and staff employed for organized research, as shown in tables 30 and 31. The demand for additional full-time equivalent professional staff is expected to continue to increase during the next 10 years, 1967–68 through 1976–77. During the past 5 years, 1962–63 through 1966–67, the demand for additional full-time equivalent professional staff was 283,000. It is expected to be 287,000 in 1967–68 through 1971–72 and 322,000 in 1972–73 through 1976–77. These figures include the number needed for both increased enrollment and replacement of staff leaving the profession.

1976 United States, 1956 to 1976 (includes effect of Elementary and Secondary Education Act of 1965) 1971 Figure 5.—Classroom teachers in regular elementary and secondary day schools: (Data from table 23) 1961 (Thousands of teachers) 0 1956 2200-1400-400-200-1600 -1000-800 -- 00:9 1800-2400 -2000 -1200-

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The state of the s 1976-77 Figure 6.—Total instru^ticnal staff for resident degree-credit courses in institutions of higher education: United States and outlying areas, first term, 1956-57 to 1976-77 1971-72 (Data from table 28) 1966-67 1961–62 (Thousands of instructors) 0-1956-57 200-400-500-100 900 300

Table 23.—Classroom teachers in regular elementary and secondary day schools, by control and by organizational level: United States, 1956-1976 12

Series C Population Projection [In thousands]

	Total p	ublic and no	onpublic		Public		Nonpu	ublic 3 (estin	mated)
Year (fall)	K-12	Elemen- tary	Second- ary (4)	K-12 (5)	Elemen- tary (6)	Second- ary (7)	K-12	Elemen- tery (9)	Second- ary (10)
(1)	(2)	(3)	(4)						
	1 954	854	499	1,199	751	447	155	103	52
1956	1,354	898	525	1,259	786	473	164	112	52
957	1,423	931	55	1,306	815	491	170	116	54
.958	1,476	952	580	1,355	832	524	176	120	56
959	1,531	984	610	1,408	858	550	186	126	60
1960	: 34	1,002	655	1,461	869	592	196	133	63
1961	1,657	1,002	690	1,508	886	621	209	140	69
1962	1,717	•	743	1,578		669	219	145	74
1^63 1964	1,797 1,872	1,053 1,090	782	1,648	940	708	224	150	74

A. INCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 ACTUAL

1,936 1,117 820 1,710 965 746 226 152 1966 4 2,019 1,162 857 1,788 1,005 783 231 157 PROJECTED 5	
PROJECTED 5	74 74
1100000100	
1967 2.086 1.190 896 1,843 1,027 816 243 163	80
1967 2,080 1,190 300 1,020 1,020 952 945 163	80
19682,137 1,204 000 1,007 1,040 988 948 168	80
1969	86
1970 2,210 1,210 1,000 1,077 1,037 940 259 173	86
1971	86
1972	86
1975	86
1974	86
19752,275 1,181 1,098 2,008 350 1,012 271 105 19762,292 1,188 1,104 2,018 1,000 1,013 274 188	86

See foomotes at end of table.

TABLE 23.—Continued

B. EXCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ESTIMATED 6									
1965	1,909 1,958	1,111 1,140	798 818	1,683 1,727	9 5 9 983	724 744	226 231	152 157	74 74
			PRO	JECTED	7				
1967	2,016	1,164	852	1,773	1,001	772	243	163	80
1968	2,057	1,175	882	1,812	1,010	802	245	165	80
1969	2,095	1,184	911	1,847	1,016	831	248	168	80
1970	2,126	1,183	943	1,870	1,013	857	25 6	170	86
1971	2,146	1,177	969	1,887	1,004	883	25 9	173	86
1972	2,157	1,166	991	1,898	993	965	25 9	173	86
1973	2,166	1,152	1,014	1,905	977	928	261	175	86
1974	2,178	1,148	1,000	1,914	970	944	264	178	86
1975	2,189	1,148	1,041	1,918	963	955	271	185	86
1976	•	1,154	1,047	1,927	966	961	274	188	86

¹ SOURCES: Classroom teacher data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1966; (2) "Enrollment, Teachers, and Schoolhousing," fall 1956 through 1963; (3) "Statistics of State School Systems," 1961-62 and 1963-64; (4) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (5) "Statistics of Nonpublic Secondary Schools, 1960-61."

² Includes full-time and part-time classroom teachers (in 1966, 98 percent of teachers in the public schools were full time). Does not include teachers in residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations.

³ Instructional staff and classroom teachers are not reported separately. Some data are estimated.

⁴ Preliminary data that include the effect of the Elementary and Secondary Education Act of 1965.

The projection of classroom teachers in public schools, including the effect of the Elementary and Secondary Education Act of 1965, assumes an additional increase in classroom teachers over the number projected under the

trend assumptions. This increase is based on the amount of funds made available by provisions of the Act. Sixty-three percent of the added teachers are assumed to be in secondary schools, based on the experience of 1966. The total number of teachers added in public schools are as follows: Fall 1967, 70,000; 1968, 30,000; 1969 through 1976, 90,000 per year.

The projection of classroom teachers in nonpublic schools is based on the assumption that the projected pupil-teacher ratios will follow the 1955-61 trend to 1976.

⁶ Estimated, using the 1956-34 trend.

⁷The projection of classroom teachers in public schools, excluding the effect of the Elementary and Secondary Education Act of 1965, is based on the assumption that the projected pupil-teacher ratios will follow the 1956-64 trend to 1976.

The projection of classroom teachers in nonpublic schools is assumed to be unaffected by the Elementary and Secondary Education Act of 1965.

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



Table 24.—Pupil-teacher ratios in regular elementary and secondary doy schools, by control and by organizational level: United States, 1956 to 1976 12

Year (fall)	Pul	olic	Nonpublic 2	
(1)	Elementary (2)	Secondary (3)	Elementary (4)	Secondary (5)
956	29.6	21.2	38.9	16.5
957	29.1	21.3	37.5	17.3
958	28.7	21.7	37.9	17.6
959	28.7	21.5	38.3	17.9
060	28.4	21.7	38.1	18.3
61	28.3	21.7	36.8	17.5
62	28.5	21.7	36.3	17.5
63	28.4	21 5	35.3	17.5
64	27.9	21.4	35.3	17.5
·	27.6	20.8	34.8	17.5
65_	27.0	26.3	33.1	17.5

A. INCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ACTUAL								
965 966 ⁴	27.6 27.0	20.8 20.3	34.8 33.1	17.5 17.5				
PRO	JECTED 5							
967	26.7	20.2	31.9	17.5				
1968	26.5	20.1	31.5	17.5				
1969	26.2	20.9	30.4	17.5				
1970	26.1	20.1	29.4	17.5				
1971	25.9	20.1	28.9	17.8				
1972	25.7	20.1	28.3	17.5				
1973	25.6	20.2	28.0	17.5				
1974	25.4	20.2	27.5	17.				
	25.3	20.2	26.5	17.5				
1975 1976	25.1	20.2	26.1	17.				

See footnotes at end of table.

B. EXCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ESTIMATED 6								
1965 1966	27.8 27.6	21.4 21.4	34.8 33.1	17.5 17.5				
PROJE	CTED 7		-	······································				
1967	27.4	21.4	31.9	17.5				
1968	27.3	21.4	31.5	17.5				
1969	27.1	21.4	30.4	17.5				
1970	27.0	21.4	29.4	17.5				
1971	26.8	21.4	28.9	17.5				
1972	26.6	21.4	28.3	17.5				
1973	26.5	21.4	28.0	17.5				
1974	26.3	21.4	27.5	17.5				
975	26.2	21.4	26.5	17.5				
1976	26.0	21.4	26.1	17.5				

'SOURCES: Classroom teacher data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 196, through 1966; (2) 'Enrollment, Teachers, and Schoolhousing," fall 1956 through 1963; (3)" Statistics of State School Systems, 1961-62"; (4) "Statistics of Nongublic Elementary Schools, 1961-62"; and (5) "Statistics of Nongublic Elementary Schools, 1961-62"; and (5) "Statistics of Nongublic Secondary Schools, 1960-61."

Includes full-time and part-time classroo. teachers (in 1966, 98 percent of teachers in the public chools were full time). Does not include teachers in residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations.

* Instructional staff and classroom teachers are not reported separately. Some data are estimated.

4 Freliminary data that include the effect of the Elementary and Secondary Education Act of 1965.

⁵ The projection of pupil-teacher ratios in the public elementary schools, including the effect of the Elementary and Secondary Education Act of 1965, is based on the ratio of elementary enrollment to the increased number of teachers expected to be hired each year 1967 to 1976 due to the effect of the Education Act.

The projection of pupil-teacher ratios in the public secondary schools, including the effect of the Education Act, is based on the ratio of secondary enrollment to the increased number of teachers expected to be hired in each year 1967 to 1976 due to the effect of the Education Act.

The projection of pupil-teacher ratios in the nonpublic elementary schools is based on the assumption that the projected pupil-teacher ratios will follow the 1955-61 trend to 1976.

The projection of pupil-teacher ratios in the nonpublic secondary schools is based on the assumption that the 1961 pupil-teacher ratio will remain constant to 1976.

• Estimated, using the 1956-64 trend.

7 The projection of pupil-teacher ratios in the public elementary schools, excluding the effect of the Elementary and Secondary Education Act of 1965, is based on the assumption that the projected pupil-teacher ratios will follow the 1956-64 trend to 1976.

The projection of pupil-teacher ratios in the public secondary schools, excluding the effect of the Elementry and Secondary Education Act of 1965, is based on the assumption that the 1964 pupil-teacher ratio will remain constant to 1976.

It is assumed that the projection of pupil-teacher ratios in the nonpublic elementary and secondary schools will be unaffected by the Education Act

For further methodological details, see appendix table C. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.



TABLE 25.—Estimated intel demand for classroom teachers in public elementary and secondary schools:

United States, 1961 to 1976 13

Series C Population Projection

-		Demand for additional certificated teac						
Year (fall)	Total teacher demand	For enrollment incresse	For replace- ment of substandard	For teacher turnover	Total			
(1)	(2)	(3)	teachers * (4)	(5)	(6)			
961	1,461,055		,					
96 2		46,497	8,988	110,884	172,369			
		70,225	-545	120,604	190,284			
963		70,407	500	126,222	197,129			
964		62,135	-1,427	131,855	192,563			
965		77,786	-6,373	136,826	208,239			
1962-66		327,050	1,143	632,391	960,584			
		AND SECO						
1965	A 1,710,319	CTUAL 62,135	1,427 6,373	131,855	192,56			
1965	A 1,710,319	CTUAL	1,427 6,373		192,56			
1965	A 1,710,319 1,788,105	CTUAL 62,135	•	131,855	192,56			
1965	A 1,710,319 1,788,105	62,135 77,786 OJECTED ⁶	•	131,855	192,56 208,23 198,26			
1965	1,710,319 1,788,105 PP:	62,135 77,786 OJECTED 6	-6,373	131,855 136,826	192,56 208,23 198,26 196,66			
1965	1,710,319 1,788,105 PP: 1,843,000 1,892,000	62,135 77,786 OJECTED 6 55,000 49,000	-6,373 220	131,855 136,826	192,56 208,23 198,26 196,66 196,58			
1965 1966 4 1967 1968	1,710,319 1,788,105 PP: 1,843,000 1,892,000 1,937,600	62,135 77,786 OJECTED 6 53,000 49,000 45,000	-6,373 220 220	131,855 136,826 143,048 147,440	192,56 208,23 198,26 196,66 196,58 178,18			
1965	1,710,319 1,788,105 PP: 1,843,000 1,892,900 1,937,600 1,960,000	62,135 77,786 OJECTED 5 55,000 49,000 45,000 23,000	-6,373 220 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806	192,56 208,23 198,26 196,66 196,58 178,18			
1965 1966 4 1967 1968	1,710,319 1,788,105 PP: 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000	62,135 77,786 OJECTED 6 53,000 49,000 45,000	220 220 220 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806	192,56 208,23 198,26 196,66 196,58 178,18 174,0 943,76			
1965. 1966 4. 1967. 1968. 1969. 1970. 1971.	1,710,319 1,788,105 PP: 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000	62,135 77,786 OJECTED 6 55,000 49,000 45,000 23,000 17,000	220 220 220 220 220 220 1,100	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608 158,160	192,56 208,23 198,26 196,66 196,58 178,18 174,07 943,76			
1965	1,710,319 1,788,105 PP: 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000 1,988,006	62,135 77,786 OJECTED 6 55,000 49,000 45,000 23,000 17,000 189,003	220 220 220 220 220 220 1,100	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608 158,160	192,56 208,23 198,26 196,66 196,58 178,18 174,0 943,76 169,3 166,2			
1965	1,710,319 1,788,105 PP: 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000 1,988,000 1,995,000	62,135 77,786 OJECTED 5 55,000 49,000 45,000 23,000 17,000 189,003 11,000 7,000	220 220 220 220 220 220 1,100 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608 158,160 159,040	192,56 208,23 198,26 196,66 196,58 178,18 174,0 943,76 169,3 166,2 168,8			
1965. 1966 4. 1967. 1968. 1969. 1970. 1971. 1967-71. 1972. 1973.	1,710,319 1,788,105 PP: 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000 1,988,000 1,995,000 2,004,000	62,135 77,786 OJECTED 6 55,000 49,000 45,000 23,000 17,000 189,009 11,000 7,000 9,000	220 220 220 220 220 1,100 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608 158,160 159,040 159,600	192,563 208,239 198,26 196,66 196,58 178,18 174,02 943,70 169,33 166,2 168,8 164,5			
1965	1,710,319 1,788,105 PP: 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000 1,988,000 1,995,000 2,004,000 2,008,000	62,135 77,786 0JECTED 6 55,000 49,000 45,000 23,000 17,000 189,003 11,000 7,000 9,000 4,000	220 220 220 220 220 1,100 220 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608 158,160 159,040 159,600 160,320	192,563 208,239 198,26 196,66 196,58 178,18 174,03 943,70 169,33 166,24 168,8			

TABLE 25.— Continued

B. EXCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 19656

ESTIMATED								
1965	1,683,000	35,000	220	131,855	167,075			
1966	1,727,000	44,000	220	131,640	178,8 6 0			
	PRO	JECTED 7						
1967	1,773,000	46,000	220	138,160	184,380			
1968	1,812,000	39,000	220	141,840	181,060			
1969	1,847,000	35,000	220	144,960	180,180			
19,"0	1,870,000	23,000	220	147,760	170,980			
1971	1,887,000	17,000	220	149,600	166,820			
1967–71		160,000	1,100	722,320	883,420			
1972	1,898,000	11,000	220	150,960	162,180			
1973	1,905,000	7,000	220	151,840	159,060			
1974	1,914,000	9,000	220	152,400	161,620			
1975	1,918,000	4,000	220	153,120	157,340			
1976	1,927,000	9,000	220	153,440	162,660			
1972–76		40,000	1,100	761,760	802,860			

¹SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1966; (2) "Enroilment, Teachers, and Schoolhousing," 1956 through 1963.

² Includes full-time and part-time classroom teachers (in 1966, 99 percent of teachers in the public schools were full-time). Does not include teachers in residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations.

Teachers with substandard credentials are those teachers who are not fully certificated as determined by the individual States. Teachers with substandard credentials were reported in the 1961-66 period as follows: 1961, 91,643; 1962, 82,655; 1963, 83,200; 1964, 82,700; 1965, 84,127; 1966, 90,500.

⁴ Preliminary data that include the effect of the Elementary and Secondary Education Act of 1965.

Secondary Education Act of 1965, assumes an additional increase in classroom teachers over the number projected under the 1956-64 trend assumptions. This increase is based on the amount of funds made available by the provisions of the Act. Sixty-three percent of the added teachers are assumed to be in secondary schools, based on the experience of 1966. The total number of teachers expected to be added in public

schools are as follows: Fall 1967, 70,000; 1968, 80,000; 1969 through 1976, 90,000 per year.

⁶ Estimated, using the 1956-64 trend.

⁷ The projection, excluding the effect of the Elementary and Secondary Education Act of 1965, of demand for teacher in addition to those retained from the previous year was based on the following assumptions: (1) For enrollment increase, the number of additional teachers needed will be the difference between the projected number that must be employed in a given year to maintain the 1956-64 trend in the pupil-teacher ratic and the similarly projected number in the previous year; (2) for replacement of substandard teachers, the number of additional teachers needed is the average annual number replaced in the 1962-66 period (220); and (3) for teacher turnover, the number of additional teachers needed to replace those leaving the profession either temporarily or permanently will be 8 percent of the total employed in the previous year. The 8 percent separation rate is based on the Office of Education study "Teacher Turnover in Public Elementary and Secondary Schools, 1959-60."

For further methodological details, see appendix table C. NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

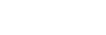


Table 26.—Estimated total demand for classroom teachers in nonpublic elementary and secondary schools:

United States, 1961 to 1976 1

Series C Population Projection

		Demand for additional certificated teachers			
Year (fall)	Total teacher demand	For enrollment increase	For teacher turnover	Total	
(1)	(2)	(3)	(4)	(5)	
1961	196,000 -				
1962	_ 209,000	13,000	7,840	20,840	
1963		10,000	8,360	18,360	
1964		5,000	8,760	13,760	
1965		2,000	8,960	10,960	
1966		5,000	9,040	14,040	
1962–66	•	35,000	42,960	77,960	
	OJECTED 2				
 1967	_ 243,000	12,000	9,240	21,24	
1968		2,000	9,720	11,72	
1965		3,000	9,800	12,80	
1670		8,000	9,920	17,92	
1971		3,000	10,240	13,24	
1967–71		28,000	48,920	76,92	
1972		0	10,360	10,36	
1973	261,000	2,000	10,360	12,36	
1974	264,000	3,000	10,440	13,44	
1975	271,000	7,000	10,560	17,56	
1976		3,000	10,840	13,84	
1079_76		15,000	52,560	6 7,5 6	

1 SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems, 1961-62"; and (2) "Statistics of Nonpublic Secondary Schools, 1960-61," and (3) "Statistics of Nonpublic Elementary Schools, 1961-62."

² The projection of demand for teachers not employed in the nonpublic schools in the previous year was based on the following assumptions: (1) For enrollment increase, the number of additional teachers needed will be the difference between the projected number that must be employed in a

given year to maintain the 1955-61 t. ...id in the pupil-teacher ratio and the similarly projected number in the previous year; and (2) for teacher turnover, the number of additional teachers needed to replace those leaving the nonpublic schools either temporarily or permanently is assumed to be 4 percent of the total employed in the previous year.

For further methodological details, see appendix table C.
NOTE.—Data are for 50 States and the District of
Columbia for all years. Because of rounding, detail may not
add to totals.



TABLE 27.—Letimated instructional staff in regular elementary and secondary day schools, by control: United States, 1956 to 1976 12

Series C Population Projection

[In thousands]

Year (fall)	Total (2)	Public schools (3)	Nonpublic schools * (4)	Total (5)	Public schools (6)	Nonpublic schools * (7)
1956	1,444	1,289	155			
1957	1,520	1,356	164			
1958	1,581	1,411	170			
1959	1,644	1,468	176			
1960	1,715	1,529	186			
961	1,787	1,591	196			
1962	1,857	1,648	209			
1963	1,947	1,728	219			
1964	2,034	1,810	224			

AND SECONDARY ACT OF 1965

MENTARY AND SECONDARY ACT OF 1965

				.,	r 1900	
A.C		ES	TIMATED 4			
1965 1966	2,109 2,207 ⁵	1,883 1,976	226 231	2,079 2,139	1,853 1,908	226 231
	PRO	OJECTED •		PF	OJECTED 7	
1967	2,285	2,042	243	2,207	1,964	243
1968	2,347	2,102	245	2,258	2,013	245
1969	2,406	2,158	248	2,306	2,058	248
1970	2,447	2,191	256	2,347	2,091	25 6
1971	2,475	2,216	25 9	2,374	2,115	259
1972	2,494	2,235	259	2,392	2,133	259
1973	2,509	2,248	231	2,408	2,147	261
1974	2,531	2,267	264	2,429	2,165	264
1975	2,548	2,277	271	2,446	2,175	271
1976	2,568	2,294	274	2,465	2,191	274

1 SOURCES: Instructional staff data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," biennial circulars 1957-58 through 1963-64; (2) "Statistics of State School Systems, 1955-56" in "Biennial Survey of Education, 1954-56," ch. 2; (3) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (4) "Statistics of Nonpublic Secondary Schools, 1960-61."

2 Instructional staff includes principals, supervisors, librarians, and guidance and psychological personnel, as well as full-time and part-time classroom teachers. (In 1966, 99 percent of classroom teachers were full-time.) Does not include instructional staff in residential schools for exceptional children, subcollegiate departments of higher education, Federal schools for Indians, and schools on Federal installations.

² Instructional staff and classroom teachers are not reported separately. Some data are estimated.

4 Estimated, using the 1956-64 trend.

• Preliminary data that include the effect of the Elementary and Secondary Education Act of 1965.

⁶ The projection of instructional staff in public schools, including the effect of the Elementary and Secondary Education Act of 1965, assumes an additional increase of approximately 80,000 in fall 1967; 90,000 in 1968; and 100,000 each year, 1960 through 1976.

7 The projection of instructional staff in regular public schools, excluding the effect of the Elementary and Secondary Education Act of 1965, is based on the assumption that the ratio of instructional steff to classroom teachers will follow the 1956-64 trend. The projection of instructional staff in nonpublic schools is the same as for classroom teachers

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District o Columbia for all years. Because of rounding, detail may not

Table 28.—Total instructional staff for resident degree-credit courses in institutions of higher education:

United States and outlying areas, first term, 1956-57 to 1976-77 1

		Ins	Junior instructional		
Yesı (1)	Tof ·1 (2)	Total (3)	Full time	Pare time (5)	staff (6)
956–57 2	250,000	217,000	148,000	69,000	33,000
957-58	•	226,536	154,602	71,934	33,9 5 0
958-59 ²	•	238,000	161,000	77,000	33,000
959-60		244,461	163,856	80,805	38,619
.960–61 ²		254,000	i70,000	84,000	42,000
.961-62		266,624	178,632	87,992	46,063
	•	287,000	192,000	95,006	49,000
962-63 2		305,459	204,561	100,898	52,694
1963-64		331,000	221,000	110,000	58,000
1964-65 2		367,000	245,300	122,000	65,000
1965-66 ³		392,000	262,000	139,000	69,000
	PROJ	ECTED 4			
1967-68	499,000	424,00°C	283,00ს	141,000	75,000
1968-69	- ·	446,000	298,000	148,000	79,000
1969-70		450,000	301,000	149,000	
1970-71.		462,000	309,000	153,000	
1971-72		479,000	320,000	159,000	
1972-73	· -	497,000	332,000	165,000	•
1973-74		516,000	345,000	171,000	
1974-75		533,000	356,000	177,000	
- 1 M / 4-7 / 1	-	•		182,000	97,00
1975-76	646,000	549,000	367,000	182,000	91,000

¹ SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Faculty in Institutions of Higher Education, November 1955"; and (2) "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 through first term 1963-64.

increase to 9.5 million; (2) the student-staff ratic will follow the 1955-56 to 1963-64 trend; and (3) the percentages of total instructional staff employed as full-time instructor or above, part-time instructor or above, and as junior staff will remain constant to 1976-77 at the 1963-64 levels of 57.1, 28.2, and 14.7 percent, respectively.

For methodological details, see appendix table C.

NOTE.—Because of rounding, detail may not add to

² Interpolated.

^{*} Estimated.

The projection of total instructional staff for resident degree-credit courses is based on the following assumptions:

(1) Total degree-credit enrollment (appendix table H) will

Table 29.—Full-time equivalent instructional staff for resident degree-credit courses in institutions of higher education: United States and outlying areas, first term, 1956-57 to 1976-77 1

	Total	In	Fuil-time		
Year	full-tir , equivalent	Total full-time equivalent	Full time	Full time	equivalent of junior instructional staff
(1)	(2)	(3)	(4)	(5)	(6)
1956-57 3	180,000	169,000	148,000	21,000	11,000
1957–58	188,554	177,554	154,602	22,952	11,000
1958–59 2	195.000	183,000	161,000	22,000	12,000
1959-60	201,283	189,283	163,656	25,627	12,000
1960-61 2	210,000	197,000	170,000	27,000	13,060
1961-62	223,277	208,277	178,632	29,645	15,000
1962-63 2	239,000	223,000	192,000	31,000	16,000
1963-64	254,367	237,367	204,561	32,806	17,000
1964-65 2	276,000	257,000	221,000	36.000	19,000
1965-66 3	306,000	285,000	245,000	40,000	21,000
1966-67 3	328,000	305,000	262,000	43,000	23,000
	PROJ	ECTED .			
1967-08.	355,000	330,000	283,000	47,000	25,000
1968-69	373,000	347,000	298,000	49,000	26,000
1969-70	376,000	357,000	301,000	49,000	26,000
1970-71	386,600	359,000	309,000	50,060	27,000
1971-72	400,000	372,000	320,000	52,000	28,000
1972-72	415,000	386,000	332,000	54,090	29,00€
1973-74	431,600	401,000	345,000	56,000	30,000
1974-75	445,000	414,000	356,000	58,000	31,000
1975-76	459,000	427,000	367,000	60,000	32,000
1976-77	471,000	438,000	376,000	62,060	33,000

¹ SOURCES: U.S. Department Thealth, "Iducation, and Welfare, Office of Education, publications: (1) "Faculty in Institutions of Higher Education, November 1955"; and (2) "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 through first term 1963-64.

instructional staff is based on the following assumptions: (1) Full-time equivalent of part-time instructor or above (table 28) will remain constant to 1976-77 at the 1963-64 level of 33.0 percent; and (2) this percentage will apply to total junior instructional staff also, and will remain constant to 1976-77 at the 1963-64 level of 33.0 percent.

For methodological details, see appendix table C.

NOTE.—Because of rounding, detail may not add to

² Interpolated.

^{*} Estimated.

⁴ The projection of full-time equivalent of part-time

TABLE 30.—Total full-time and part-time progressional staff in institutions of higher education: United States and outlying areas, first term, 1956-57 to 1976-77 12

Year (1)		Ins	tructional staff		Other professional staff				
) VII II	Total	For resident degree-redit courses ?	Other instructional staff	Total	Administration and services 5 (7)	Organ' es research ⁵ (8)		
1050 57 7	365,000	301,000	250,000	51,000	64,000	34,000	30,000		
956-57 7	384,072	313,544	260,468	53,076	70,528	37,997	32,531		
957-58	405,000	329,000	274,000	55,000	76,000	41,000	35,000		
1959-60	421,931	340,531	283,080	57,451	81,400	44,301	37,699		
1960-61 7	443,000	353,000	296,000	57,000	90,000	46,000	44,600		
1961-62	467,990	369,499	312,687	56,812	98,49i	48,433	50,058		
1962-63 ⁷	507,000	395,000	336,000	59,000	112,000	54,000	58,000		
1963-64	544,152	420,278	358,153	62,125	123,874	58,786	65,08		
1964-65 1	591,000	456,000	389,600	67,000	135,000	64,000	71,00		
1965-66 8	657,000	507,000	432,000	75,000	150,000	71,000	79,00		
1966-67 ⁸	701,000	541,000	461,000	80,000	160,000	76,000	84,00		
		Pl	ROJECTED	9					
1967-68	758,000	585,000	499,600	86,000	173,000		91,00		
1968-69		615,000	524,000	91,000	181,000		95,00		
1969-70	- 0 - 0 - 0 - 0	622,000	530,000	92,000	183,000	_	96,00		
1970-71		538,000	544,000	94,900	188,000		99,00		
1971-72		660,000	563,000	97,000	194,000		102,00		
1972-73		686,000	585,000	101,000	202,000		106,00		
1973-74		712,000	607,000	105,000	210,000				
1974-75		735,000	627,000	108,900	217,000		114,00		
1975-76		758,000	646,000	112,000	224,000		118,00		
1976-77		777,000	662,000	115,CGO	229,000	109,000	120,00		

1 SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Faculty in Institutions of Higher Education, November 1955"; and (2) "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term, 1957-58 through first term, 1963-64.

²Excludes professional staff for instruction at the elementary and secondary school level.

*Includes faculty with rank of instructor or above and junior instructional staff.

Includes instructional staff for extension, resident nendegree-credit courses, and instruction by mail, radio or TV, short courses, and individual lessons.

*Includes professional staff for general administration, student personnel services, and libraries.

Includes only professional staff engaged specifically for full-time or part-time research and those who have been relieved from some or all other duties in order to perform

systematic organized research. Excluder graduate students not performin research at a professional level and research consultants employed occasionally.

7 Interpolated.

* Estimated.

The projection of total full-time and part-time instructional staff for resident degree-credit courses is detailed in table 28, footnote 4.

The projection of total full-time and part-time other instructional staff, professional staff for a ministration and services, and professional staff for organized research is based on the percent each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages were 17.3, 16.4, and 18.2 percent, respectively, and are assumed to remain at the 1963-64 level to 1976-77.

For further methodological details see appendix table C.
NOTE.— Because of rounding, detail may not add to totals.

Table 31.—Total estimated full-time-equivalent professional staff in institutions of higher education:

United States and outlying areas, first term, 1956-57 to 1976-77 123

Year	Total full-time equivalent		-time-equivale structional state		Full-time-equivalent other professional staff			
2000	professional staff	Total	For resident degree- credit courses	Other instruc- tional staff	Total	Adminis- tration and services	Organized research	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1956–57 4	261,000	216,000	180,000	36,000	45,000	24,000	21,000	
1957–58	•	227,000	189,000	38,000	50,000	-	23,000	
1958 -59 4	• •	234,000	195,000	39,000	54,000	29,000	25,000	
1959-60	•	242,000	201,000	41,000	57,000	31,000	26,000	
950-61 4	•	251,000	210,000	41,000	64,000	33,600	31,00	
1961-62		264,000	223,000	41,000	71,000	35,000	36,00	
1962-63 4	•	282,000	239,000	43,000	77,000	36,000	41,60	
1963-64	•	302,000	254,000	48,000	88,000	42,000	46,00	
1964-65 4		324,000	276,000	48,000	96,000	45,000	51,00	
1965-66 5		359,000	306,000	53,000	106,000	50,000	56,00	
1966–67 5	500,000	385,000	323,000	57,000	115,000	54,000	61,000	
		PI	ROJECTEI) 6				
1967-68	54C,000	416,000	355,000	61,000	124,000	58,000	66,000	
1968-69		438,000	373,000	65,000	132,000	61,000	71,00	
1969-70	579,000	441,000	376,000	65,000	138,000	•	76,00	
1970-71	597,000	453,000	386,000	67,000	144,000	-	81,00	
1971-72		469,000	400,000	69,000	151,000	-	86,00	
1972-73		487,000	415,000	72,000	159,000	-	91,00	
1973-74	•	506,000	431,000	75,000	167,000	•	96,00	
1974-75	•	522,000	45,000	77,000	174,000	•	101,00	
1975-76	•	539,000	459,000	80,000	181,000	-	106,00	
1976-77	741,000	553,000	471,000	82,000	188,000	77,000	111,00	

¹ SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Faculty in Institutions of Higher Education, November 1955"; and (2) "Faculty and Other Professional Staff in Institution of Higher Education, biennially, first term, 1957-58 through first term, 1963-64.

The projection of full-time equivalent of total full-time and part-time professional staff for organized research is based on the assumption that the average increase of 5,000 full-time equivalents per year during the past 5 years will continue to 1976-77.

For further methodological details, see appendix table C. NOTE.—Because of rounding, detail may not add to totals.

² For the categories of professional staff members included in this table, see footnotes 2 through 6, table 30.

The estimation, from 1956-57 through 1966-67, of full-time equivalents of reported total full-time and part-time professional staff for other instructional courses, for administration and services, and for organized research is based on the following assumption: The percentage that full-time-equivalent instructional staff for resident degree-credit courses is of total full-time and part-time instructional staff for these courses (71 percent in 1963-64) will apply to all other professional staffs as we'l The totals for the full-time and part-time professional staffs shown in table 30 were multiplied by this percentage.

⁴ Interpolated.

Estimated.

[•] The projection of full-time equivalent of total full-time and part-time other instructional staff and of professional staff for administration and services is based on the following assumptions: (1) the percentage that full-time-equivalent instructional staff for resident degree-credit courses is of total full-time and part-time instructional staff for these courses (71 percent in 1963-64) will continue to apply to full-time and part-time other professions aff and to professional staff for administration and sences; and (2) this percent will remain constant through 1966-67.

Table 32.—Total demand for estimated full-time-equivalent instructional staff in institutions of higher education: United States and outlying areas, first term, 1961-62 to 1976-77 12

Year	Total	For resident degree-credit	Other instruc- tional staff	Total	For increased enrollment	For replacement	
(1)	(2)	courses		(5)	(6)	(7)	
961-62	264,000	223,000	41,000				
962-63 4	282,000	239,000	43,000	34,000	18,000	16,00	
963-64	302,000	254,000	48,000	37,000	20,000	17,00	
964-65 4	324,000	276,000	48,000	40,000	22,000	18,00	
965-66 ⁶	359,000	306,000	53,000	54,000	35,000	19,00	
966-67 5	385,000	328,000	57,000	48,000	26,000	22,00	
962-67	•			213,000	121,000	92,00	
		PRO	JECTED 6				
967-68	416,C00	355,000	61,000	54,000	31,000	23,00	
968-69	438,000	373,000	65,000	47,000	22,000	25,00	
.969-70	441,000	376,000	65,000	29,000	3,000	26,00	
970-71	453,000	386,000	67,000	38,000	12,000	26,00	
.971–72	469,000	400,000	69,000	43,000	16,000	27,00	
967-72				211,000	84,000	127,0	
1972-73	487,000	415,000	72,000	46,000	18,000	28,0	
1973-74	506,000	431,000	75,000	48,000	19,000	29,0	
1974–75	•	445,000	77,000	46,000	16,000	30,0	
197 5-7 6	•	459,000	80,000	48,000	17,000	31,0	
1976–77		471,000	82,090	46,000	14,000	32,0	
,,	•	•		234,000	84,000	150,0	

1 SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Faculty in Institutions of Higher Education, November 1955"; and (2) "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term, 1957-58 through first term, 1963-64.

² For the categories of professional staff members included in this table, see footnotes 2 through 6, table 30.

For method of estimating and projecting full-time equivalents, see table 29, footnote 4, and table 31, footnotes 3 and 6.

Interpolated.

Estimated.

he projection of additional full-time-equival. instructional staff for increased enrollment was computed as the difference between the total full-time equivalents employed in 2 successive years.

The projection of additional full-time-equivalent instructional staff for replacement of those leaving the profession, temporarily or permanently, was estimated at 6 percent of the total full-time-equivalent instructional staff employed in the previous year.

For methodological details, see appendix table C.

NOTE.—Because of rounding, detail may not add to totals.

Table 33.—Total demand for estimated full-time-equivalent professional staff in institutions of higher education: United States and outlying areas, first term, 1961-62 to 1976-77 12

	Tota	l full-time-ed	quivalent pro	Additional full-time-equivalent professional staff				
Year (1)		Instructio	nal staff			. 		
	Fotal For resident degree-credit		Other instruc- tional statf	Adminis- tration and services	Organized research	Total	For increased enroll-ment	For replacement
	(2)	courses (3)	(4)	(5)	(6)	(7)	(8)	(9)
 1961 – 62	335,000	223,000	41,000	35,000	36,000			
1962-63 4	•	239,000	43,000	36,000	41,000	44,000	24,000	20,000
1963-64	•	254,000	48,000	42,000	46,000	53,000	31,000	22,000
1964-65	420,000	276,000	48,000	45,000	51,000	53,000	30,000	23,000
1965-66 5		306,000	53,000	50,000	56,000	70,000	45,000	25,000
1966-67 5		328,000	57,000	54,000	61,000	63,000	35,000	28,000
1962-67						283,000	165,000	118,000
			PROJE	CTED 6				
1967-68	540,000	355,000	61,000	58,000	66,000	70,000	40,000	30,00
1968-69	•	373,000	65,000	61,000	71,000	62,000	30,000	32,00
1969-70	•	376,000	65,000	62,000	76,000	43,000	9,000	34,00
1970-71		386,000	67,000	63,000	81,000	53,000	18,000	35,00
1971–72		400,000	69,000	65,000	86,000	59,000	23,000	36,00
1967–72						287,000	120,000	167,00
1972-73	. 646,000	415,000	72,000	68,000	•	63,000	26,000	37,00
1973-74	673,000	431,000	75,000	71,000	•	66,000	27,000	39,00
1974-7';	696,000	445,000	77,000	73,000	101,000	63,000	23,000	40,00
1975-76	720,000	459,000	80,000	75,000		66,000	24,000	42,00
1976-77	•	471,000	82,000	77,000	111,000	64,000	21,000	43,00
1972-77						322,000	121,000	201,00

¹ SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Faculty in Latitutions of Higher Education, November 1955"; and (2) "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term, 1957-58 through first term, 1963-64.

² For the categories of professional staff members included in this table, see footnotes 2 through 6, table 30.

^{*} For method of estimating and pro..cting full-time equivalents, see table 29, footnote 4, and table 31, footnotes 3 and 6.

⁴ Interpolated.

⁵ Estimated

The projection of additional full-t ne-equivalent professional staff for increased enrollment was computed as the difference between the total full-time-equivalent professional staff employed in 2 successive years.

The projection of additional full-time-equivalent professional staff for replacement of those leaving the profession, temporarily or permanently, was estimated at 6 percent of the total full-time-equivalent professional staff employed in the previous year.

For methodological details, see appendix table C.

NOTE.—Because of rounding, detail may not a ld to totals.

Chapter IV

Expenditures of Educational Institutions

Kenneth A. Simon and C. George Lind

Explanations and definitions

All the main tables shown here include only expenditures of regular public and nonpublic elementary and secondary schools and institutions of higher education in the 50 States and the District of Columbia. This means that "other" and "special" institutions are not included.

"Other" institutions include other elementary and secondary schools, such as residential schools for exceptional children (public and nonpublic), Federal schools for Indians (public), and federally operated elementary and secondary schools on posts (public). in 1966-67, it is estimated that expenditures of "other" schools were about \$200 million for public and \$100 million for nonpublic schools in this category. Almost all "other" schools, including the nonpublic, are nonprofitmaking institutions.

"Special" institutions include schools such as trade schools or business colleges not in the regular school or college framework. Expenditure data are not available for "special" schools, but it would seem that they might spend approximately \$700 million per year. This supposition is based on the fact that the U.S. Bureau of the Census estimated that 1.3 million persons, aged 5 to 34 years, were enrolled in "special" schools in October 1965. If we assume an average expenditure per student of about \$540, their total expenditures would be about \$700 million. Almost all "special" schools are nonpublic profitmaking institutions.

Regular institutions include public and most nonprofitmaking nonpublic elementary and secondary schools (kindergarten through grade 12) plus the institutions of higher education offering degree-credit courses and a small number of technical and professional schools. Most of these schools and colleges are oriented toward regular academic programs, but some of them are primarily technical training institutions or offer both academic and vocational courses. As we said earlier, all the main tables and discussions here are for the regular institutions. However, we do include "other" schools in our discussion and text table on expenditures by source of funds.

Total expenditures include all funds expended for capital outlay, current expenditures, and interest.

They exclude repayment of debt and transfers of funds that would result in duplication.

Capital outlay includes expenditures which result in additions to fixed essets. This includes the

Capital outlay includes expenditures which result in additions to fixed essets. This includes the expenditures by public school building authorities but excludes lease or rental payments made to these agencies. Borrowed money is included; a large percentage of the funds expended for capital outlay was received from loans. In 1961–62, it was estimated that 38 percent of the capital outlay for public elementary and secondary schools was for land and buildings and the remaining 12 percent for new school buses and other equipment. The percentage for equipment could be higher than 12 percent in 1966–67 because a substantial amount of the funds available from the Elementary and Secondary Education Act of 1965 was spent for equipment. About 82 percent of the capital outlay by institutions of higher education was for lands and buildings, and the remaining 18 percent was for equipment.

Current expenditures include any expenditures except those for repayment of debt and capital outlay. Interest is generally excluded from the current expenditures shown here because it is treated separately. The largest current expense item is salaries of instructional staff. About 60 percent expenditures by public elementary and secondary schools is for this purpose. The remaining 40 percent expenditures by public elementary and secondary schools is for this purpose.

goes for transportation, maintenance, etc.

Interest includes all funds expended for the use of money. Most of the interest shown here was expended on account of long-term debt that was incurred for constructing buildings.

Expenditures by regular and "other" schools by source of funds

Although we have not attempted to project the source of funds expended by educational institutions,



¹ U.S. Department of Commerce, Bureau of the Census, "Current Population Reports, School Enrollment: October 1965." Series P-20, No. 162, March 24, 1967.

we can show estimates of how they identified sources of funds they expended during the past 11 years. In order to do this, estimates for "other" schools were added to the total expenditures shown in table 34 for the appropriate years. The resulting total expenditures for regular and "other" schools were then broken down by source of funds by first adjusting receipts to equate them with expenditures, and then assuming a continuation of the 1955-56 to 1963-64 trend in the amount of receipts from each source. In the case of elementary and secondary schools, the trend was modified by adding \$1 billion to the trend figure for 1965-66, 1966-67, and 1967-68, because of the Elementary and Secondary Education Act of 1965. Equating receipts to expenditures was accomplished mainly by including loans and excluding the receipts used for repayment of loans.

Estimated expenditures by regular and "other" educational institutions, by source of funds: United States, 1955-56 to 1967-68 \(^1\)

[In billions of current d	iollars and as	percentages]
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Source of funds, by control and level (1)	1955-56 (2)	1957-58 (3)	1959-60 (4)	1961-62 (5)	1963-64 (6)	1964-65 (7)	1965-66	1966–67 (9)	1967-63 (10)
			AN	10UNT					
All levels:									
Total, public and non-						200 0	244.0	400	aro c
public	- \$16.8	\$21.1	\$24.7	\$29.6	\$36. 0	\$39.9 	\$44.8	\$48.8	\$52.2
Federal		1.4	1.8	2.4	3.2	3.7	5.4	6.1	6.8
State	_			8.9	10.7	11.8	13.2	14.7	15.5
Local			9.6	11.2	12.9	14.1	14.9	15.8	16.6
All other		5.0	6.0	7.1	9.2	10.3	11.3	12.2	13.3
Total, public	13.6	17.0	19.7	23.4	28.0	31.0	35.0	38.2	40.6
Federal	8	1.1	1.3	1.6	2.1	2.3	3.7	4.1	4.8
State		6.2	7.3	8.8	10.6	11.7	13.1	14.6	15
Local	7.2	8.5	9.6	11.2	12.9	14.1	14.9	15.8	16.6
All other	8	1.2	1.5	1.8	2.4	2.9	3.3	3.7	4.
Total, nonpublic	3.2	4.1	5.0	6.2	8.0	8.9	9.8	10.6	11.
Federal		.3	.5	.8	1.1	1.4	1.7	2.0	2.
State		(2)	(2)	.1	.1	.1	.1	.1	•
Local	1.1	(²)	(2)	(2)	(²)	(²)	(²)	(²)	(²)
All other				5.3	6.8	7.4	8.0	8.5	9.

See footnotes at end of table.

Estimated expe ditures by regular and "other" educational institutions, by source of funds: United States, 1955-56 to 1967-681—Continued

Source of funds, by control and level (1)	1955-56 (2)	1957-58 (3)	1959-60 (4)	1961-62 (5)	1963-64 (6)	1964-65 (7)	1965-56 (8)	1963-67 (9)	1967-68 (10)
				AMC	OUNT				
lementary and secondary					· · · · · · · ·				
schools:									
Total, public and non-					24.0	04.0	00.0	20.0	33.
public	_ 12.7	15.8	18.0	21.1	24.8	26.8	29.9	32.2	
m 1 1	5	.7	.8	.9	1.0	1.0	2.1	2.3	2.
Federal		4.8	5.7	6.8	8.1	8.7	9.7	10.8	11.
State				11.0	12.6	13.8	14.5	15.4	16
Local		8.4				3.3	3.6	3.7	4.
All other	1.4	1.9	2.1	2.4	3.1				
Total, public	11.3	13.9	15.9	18.7	21.7	23.5	26.3	28.5	29
				.9	1.0	1.0	2.1	2.3	2
Federal						8.7	9.7	10.8	11
State					8.1			15.4	16
Local	7.1	8.4	9.4	11.0	12.6	13.8	14.5	10.4	10
All other									
Total, nonpublic	1.4	1.9	2.1	2.4	3.1	3.3	3.6	3.7	4
Federal									
State									
Local								-	
All other				2.4	3.1	3.3	3.6	3.7	4
nstitutions of higher educa-									
tion:									
Total, public and non-									
public	4.1	5.	3 6.7	7 8.5	11.2	13.1	14.9	16.6	18
parate									
Federal	5	j .	7 1.0	1.5	2.2	2.7			
State			1.6	3 2.1	2.6	3.1	3.5	3.9) 4
					3	.3	.4	4	:
Local							7.7	8.5	; (
All other									
Total, public	2.3	3 3.	1 3.8	8 4.7	6.3	7.5	8.7	9.7	1(
Federal		3	4	 5 .7	7 1.1	1.8	3 1.6	3 1.8	3 :
				-				3.8	} 4
State				· .2					
Local			1						
All other	•	8 1.	2 1.	0 1.0				- 	
Total, nonpublic	1.	8 2.	2 2.	9 3.	8 4.9	5.	6 6.	2 6.9	9
		<u> </u>	3 .	5 .	8 1.	1 1.	4 1.	7 2.0	0
Federal					_				
		141	(*)				- •	- •	
State		(²)	1.1			(2)	(2)	(2)	(2
	(2)	(²)	(²)	(²)	(2)	(²) 7 4.		(2) (4)	

Estimated expenditures by regular and "other" educational institutions, by source of funds United States, 1955-56 to 1967-681—Continued

Source of funds, by control and level (1)	1955-56 (2)	1957-58 3 (3)	1959-60 (4)	1961-62 (5)	1963-6 <u>4</u> (6)	196465 (7)	1965-66	1966-67 (9)	1967~68 (10)
					PERCE	N'T			
l levels:									
Total, public and non-					_		100.0	100.0	100 4
public	_ 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.
The description	5.9	6.6	7.5	8.3	8.9	9.3	12.0	12.5	13.
Federal		29.4	29.5	30.0	29.9	29.6	29.5	30.1	29.
State				37.3	35.7	35.3	33.3	32.4	31.
Local		40.2	39.0			25.8	25.2	25.0	25.
All other	_ 22.4	23.8	24.0	$\overset{24.4}{}$	25.5 	20.0			20.
Total, public		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.
Federal		6.4	6.9	7.1	7.5	7.4	10.6	10.7	11.
State		36.6	36.9	37.7	38.1	37.7	37.4	38.2	37.
		50.0	48.8	47.3	45.9	45.5	42.6	41.4	40.
Local				7.9	8.5	9.4	9.4	9.7	10.
All other	6.5	7.0	7.4	7.9	0.0				
Total, nonpublic	_ 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100
Federal	6.5	7.1	9.8	12.5	13.8	15.7	17.4	18.9	19
State		(*)	(*)	1.6	1.2	1.1	1.0	.9	, ,
Local		(3)	(*)	(³)	(3)	(3)	(*)	(*)	(3)
All other		92.9	90.2	85.9	85.0	83.2	81.6	80.2	79.
lementary and secondary									
schools:									
Total, public and non-							100.0	100.0	100
public	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100
Federal	3.9	3.9	4.3	4.2	4.0	3.7	7.0	7.2	7
State		30.5	31.4	31.8	32.7	32.5	32.5	33.4	33
		53.5	52.4	51.9	50.8	51.5	48.5		47
Local			11.9	12.1	12.5	12.3	12.0	11.6	11
All other	10.2	12.1	11.9						
Total, public	10ú.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100
Federal	4.3	4.3	4.9	4.8	4.6	4.3	8.0	8.1	8
State			35.6			37.0	36.9	37.8	37
Local			59.5			58.7	55.1	54.1	54
All other									
					100.0	100.0	100.0	100.0	100
Total nonnuble	100.0	100.0					=====		
Total, nonpublic									
Federal									
Federal									
									·

Estimated expenditures by regular and "other" educational institutions, by source of funds: United States, 1955-56 to 1967-68 1—Continued

Source of funds, by control and level (1)	1955-56 (2)	1957-58 (3)	1959-60 (4)	1961-62 (5)	1963-64 (6)	1964-65 (7)	1965-66 (8)	1966-67 (9)	1967-68 (10)			
	PERCENT											
Institutions of higher												
education:												
Total, public and non-								100.0				
public	_ 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
Feder8l	12.1	13.6	16.0	18.1	19.5	20.6	22.1	22.9	24.0			
State		26.7	24.8	24.6	23.9	23.7	23.5	23.5	23.0			
Local		3.1	2.8	2.6	2.6	2.3	2.7	2.4	2.2			
All other	-	56.6	56.4	54.7	54.0	53.4	51.7	51.2	50 . 8			
Total, public	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
Federal	11.5	13.1	15.0	16.0	17.1	17.7	18.3	18.9	19.			
State		44.1	41.9	42.1	40.2	39.7	39.2	38.6	38.0			
Local	_ 5.1	5.1	4.7	4.3	4.4	4.3	4.2	4.1	4.0			
All other	37.8	37.7	38.4	37.6	38.3	38.3	38.3	38.4	38.			
Total, nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.			
Federal		14.4	17.4	20.9	23.6	25.3	26.9	28.4	29.			
State		1.2			1.2	1.2	1.3	1.4	1.			
Local				.2	.2	.2	.2	.2	•			
All other	_ 85.4			77.4	75.0	73.3	71.6	70.0	68.			

¹ In addition to regular schools (shown in table 34) these figures include "other" elementary and secondary schools such as residential schools for exceptional children, Federal schools for Indians, and federally operated elementary and secondary schools on posts. The annual expenditures of "other" elementary and secondary schools were estimated as follows:

Data for the table above were based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," 1955-56, 1957-58, 1959-60, 1961-62, and 1963-64; (2) "Statistics of Public Schools," fall 1964, 1965, and 1966; (3) "Figure 1965 of Higher Education," 1955-56, 1957-58, 1959-60, 1961-62 and 1963-64 surveys; (4) "Digest of Educational Statistics," 1966; and unpublished data in the U.S. Office of Education.

Total expenditures were defined as the expenditure of all money from both loans and grants and exclude only the funds used for reducing debt and transfers that result in duplication. Expenditures from Federal, State, and local sources are defined as institutional expenditures of all grants (but not loans) of funds received from those sources. Expenditures from all other sources include all funds received by the institutions that were not received as a grant from Federal, State, and local governments. Loans to institutions of higher education from any source are included in under "all other." (It is estimated that in 1966-67 more than \$500 million in Federal loans to institutions of higher education was included in the

Years
 Public Million
 Nonpublic

 1955-56 to 1959-69
 \$100
 Less than \$50 million.

 1960-61 to 1962-63
 200
 Less than 350 million.

 1963-64 to 1967-68
 200
 \$100 million.

² Less than \$50 million.

Less than 0.05 percent.

all other category shown here.) There is virtually no income from the "all other" source for public elementary and secondary schools although nonrevenue receipts include loans. These loans are made by the local governments for the schools, and consequently the source of funds is the local government.

Since the foregoing definitions are designed to show sources of funds through the eyes of educational institutions, the Federal figures shown in the preceding table are different from the ones shown in the appendix expenditure table on Federal funds for education. The three main reasons are as follows:

- (1) Different items are included. For example, the table on Federal funds shows grants and loans to individuals, which would appear in institutional accounts as a receipt from tuition or auxiliary services; or it may be spent for board and room outside the institution and not be a receipt of the institution from any source.
- (2) The same items may be handled differently. For example, the table on Federal funds shows only basic research for institutions of higher education, while the institutions include some applied research grants from the Federal Government.
- (3) The table on Federal funds generally shows obligated funds, while the institutional figures show expenditures.

Total expenditures by regular institutions

Total annual expenditures of regular educational institutions (in 1966-67 dollars) increased from \$23.3 billion in 1956-57 to \$48.5 billion in 1966-67, and are expected to be \$70.2 billion in 1976-77. The expenditure increases are due chiefly to increases in enrollment at all levels of education, especially in high schools and colleges, and the increasing costs of the many items, such as school facilities and teachers' salaries, that are necessary for providing education. The projected total expenditures are shown in table 34. They are based mainly on the assumptions that the 1956-57 to 1966-67 trend will continue through 1976-77, and that some additional amounts (above trend) will be expended because of the effects of the Elementary and Secondary Education Act of 1965. The actual amounts assumed to be due to the act are shown in table 36.

Current expenditures for regular public elementary and secondary schools

Annual current expenditures for public elementary and secondary schools (in 1966-67 dollars) increased from \$11.1 billion in 1956-57 to \$23.4 billion in 1966-67, an increase of 111 percent. They are expected to increase 37 percent to \$32.0 billion by 1976-77. These projections include the increased expenditures expected because of the Elementary and Secondary Education Act of 1965.

Increased enrollment together with increased costs per pupil have accounted for the increase in current expenditures. Expenditures have been increasing and are expected to continue to increase for practically all of the major items included in current expense, such as administration, instruction, operation and maintenance of plant, fixed charges, and other school services and programs. Annual current expenditures per pupil (in 1966-67 dollars) increased from \$374 in 1956-57 to \$569 in 1966-67, and are expected to increase to \$733 by 1976-77. The last two figures include the effects of the Elementary and Secondary Education Act of 1965.

Projected current expenditures for public elementary and secondary day schools are shown in table 36. They were projected as follows:

- (1) Current expenditures per pupil in average daily attendance (ADA) for the base years' 1955-56 to 1965-66, were converted to 1966-67 dollars on the basis of the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. Monthly index numbers were averaged on a July-June basis to correspond to the school years.
- (2) The current expenditures per pupil excluding the effects of the Elementary and Secondary Education Act for the years 1955-56 to 1964-65 were used in deriving a formula (by least squares) for projecting trend figures for 1965-66 to 1976-77. This formula was y' = \$341 + \$17t (t = time in years, t = 1 in 1955-56).
- (3) Average daily attendance was projected for 1967-68 to 1976-77 by assuming that the ratio of average daily attendance to fall enrollment in kindergarten through grade 12 will remain constant at the 1966-67 level of 92.7 percent.
- (4) Total current expenditures (excluding effects of the Elementary and Secondary Education Act, 1965) allocated to public elementary and secondary school pupil costs (1966-67 dollars) were projected for 1965-66 to 1976-77 by multiplying the current expenditures per pupil, as projected in step (2), by the corresponding average daily attendance projected in step (3). These figures exclude expenditures for summer schools, adult education, and community colleges operated by school districts.

(5) Total current expenditures (excluding effects of the Elementary and Secondary Education Act, 1965) for all programs operated by school districts, including summer schools, adult education, and community colleges were projected for 1967-68 to 1976-77 by assuming that the ratio of current expenditures for all programs to current expenditures allocated for public elementary and secondary school pupil costs will remain constant at the 1966-67 ratio of 103 percent.

(6) Current expenditures per pupil (including the Elementary and Secondary Education Act, 1965) allocated to public elementary and secondary pupil costs were projected by adding \$25 to the figures projected in step (2). (In 1966-67, the current expenditure per pupil reported by State departments of education was \$33 higher than the trend figure for 1966-67 derived

(7) Total current expenditures allocated to pupil costs (including the effects of the Elementary and Secondary Education Act of 1965) were projected by multiplying the current expenditures per pupil, as projected in step (6), by the corresponding average daily attendance projected in step (3).

(8) Total current expenditures for all programs operated by school districts (including the effects of the Elementary and Secondary Education Act) were projected by multiplying the

figures in step (7) by 103 percent.

Expenditures for salaries of instructional staff in regular public schools

A large part of current expenditures for public elementary and secondary schools is for salaries of instructional staff (62 percent in 1966-67). Total expenditures for salaries of instructional staff (in 1966-67 dollars) increased from \$6.8 billion in 1956-57 to \$14.0 billion in 1966-67, and are expected to be \$21.3 billion in 1976-77. These increases are due to larger numbers of instructional staff and to higher average annual salaries. The amounts for 1966-67 to 1976-77 also reflect the larger number of instructional staff expected on account of the Elementary and Secondary Education Act of 1965.

The average annual salary of instructional staff (in 1966-67 dollars) increased from 35,269 in 1956-57 to \$7,100 in 1966-67, and is expected to be \$9,000 in 1976-77. During the past 10 years, the average annual salary has been increasing about \$183 per year in 1966-67 dollars. The projected figure for 1976-77 (\$9,000) is based on the assumption that the 1955-56 to 1964-65 trend will continue to

Projected total and average annual salaries of instructional staff in public elementary and secondary schools are shown in table 37. The procedure was as follows:

(1) The average annual salary (y) was projected as a continuation of the 1955-56 to 1964-65 tiend: y' = \$4,878 + \$189t (t = time in years, t = 1 in 1955-56).

(2) Total expenditures for salaries of instructional staff were then computed as the product of the average annual salary and the total number of instructional staff. (The total number of instructional staff was taken from table 27.)

Classroom construction and capital outlay by regular public elementary and secondary schools

Capital outlay (in 1966-67 dollars) by public elementary and secondary schools, including the expenditures of State and local school building authorities, was \$17.8 billion for the 5-year period 1957-58 to 1961-62, and \$18.4 billion for the following 5-year period, 1962-63 to 1966-67. It is expected to be \$19.0 billion for 1967-68 to 1971-72 and a similar amount for 1972-73 to 1976-77.

Projected expenditures for capital outlay together with projections of classroom construction are shown in tables 38 and 39. They are not projections of need but are simply projections of the classroom construction and capital outlay expected in the light of the 1957-58 to 1966-67 trend.

Procedure

The procedure was as follows:

(1) The total number of rooms completed was projected on the basis of the 1957-58 to 1966-67 trend y' = 69,897 + 68t (t = time in years, t = 1 in 1957-58). The basic data and projections are shown in table 38.

(2) The number of classrooms that would be completed on account of enrollment was assumed to be equal to the enrollment increases over each 5-year period divided by the median



pupil-room ratios for 1964-65. These ratios were 27.4 for elementary and 27.5 for secondary schools.

- (3) The number of classrooms that could be completed on account of current replacements (abandonments), migration, consolidation of school districts, and reduction of crowded and unsatisfactory rooms was derived by subtracting the number completed on account of enrollment increases from the total number completed. (The number of rooms abandoned was 88,000 in the 5-year period 1957-58 to 1961-62, and 86,000 in the 5-year period 1962-63 to 1966-67).
- (4) Capital cutlay was projected by multiplying the number of rooms completed by the average capital outlay per room in the 1965-65 to 1965-67 periou. This figure was \$54,000 per room in 1966-67 dollars. The basic data and projections are shown in tables 38 and 39.
- It should be noted that not all the capital outlay shown here represents construction. It was estimated that, in 1961-62, 2 percent of capital outlay was for transportation equipment, 10 percent for other equipment, and the remaining 88 percent was for land and buildings.

Data sources

Data include 50 States and the District of Columbia for all years. Data are based mainly on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education, "Statistics of State School Systems," 1955-56, 1957-58, 1959-60, 1961-62, and 1963-64; "Enrollment, Teachers, and Schoolhousing," fall 1955 to fall 1963: Statistics of Public Schools," fall 1964 to 1966; and "Bond Sales for Public School Purposes," 1960-61 to 1965-66.

Reason for construction

Table 39 shows that we may expect a sharp decrease in the number of rooms to be completed on account of enrollment increase; and a sharp increase in the number completed for other reasons. Other reasons include (1) replacements (abandonments), (2) migration factors (including school district reorganization), and (3) reduction of crowded and unsatisfactory rooms. Data limitations do not permit an exact analysis of these three factors, but we can gain some insight into the way they might operate if we examine data for the past 5 years (1962-63 to 1966-67). During this period, a total of 347,000 rooms were completed and 86,000 were abandoned.

If we assume that the 86,000 abandoned rooms were all replaced, and that 164,000 of the completed rooms were used for taking care of enrollment increases, it would leave 97,000 rooms that could have been used for taking care of migration and the reduction of crowded and unsatisfactory rooms (347,000 – 86,000 – 164,000 = 97,000). Since we have some indications that the number of crowded and unsatisfactory rooms did not change substantially during the 5-year period, we might assume that almost all these 97,000 rooms were used to take care of migration factors, and therefore, that about 183,000 rooms were completed on account of abandonments and migration together (86,000 + 97,000 = 183,000). If we apply this 183,000 for migration and replacement to our projections, the number of rooms completed for reducing crowded and unsatisfactory classrooms could be approximately 107,000 in 1967–68 to 1971–72 and 172,000 in 1972–73 to 1976–77. That is, in 1967–68 to 1971–72 the total classrooms completed (355,000) minus the number for enrollment increases (65,000) minus the number for migration and abandonments (183,000) equals the number for reducing crowded and unsatisfactory rooms 107,000); and comparable figures for 1972–73 to 1976–77 would be 355,000 — 183,000 = 172,000 (enrollment increases are expected to be negligible) that could be applied to reduction of crowded and unsatisfactory rooms.

Figures derived in this way are not intended for use as firm estimates of reasons for construction because they are, in a sense, partly hypothetical. That is, they show numbers of rooms completed that could have been (but may not have been) completed for various reasons. Nevertheless, they throw some light on the probable reasons for past and future construction.

Crowded and unsatisfactory rooms

Indications that the number of crowded and unsatisfactory rooms was not reduced during the 1962-66 period are shown in Office of Education studies on school facilities for 1962 and 1964-65.² The following information was selected from those two studies:

^{*} George J. Collins, U.S. Department of Health, Education, and Welfare, Office of Education 'National Inventory of School Facilities and Personnel, Spring 1962." George J. Collins and William L. Stormer, "Condition of Public School Plants, 1964-65."

Item	19 62	1964-65
Number of additional public school classrooms needed:		
To eliminate off-site	6,000	14,000
To eliminate nonpermanent	31,030	31,000
To eliminate improvised or makeshift	28,000	31,000
To eliminate rooms in buildings with 3 or more defects	(Not avail- able)	158,000
To achieve a pupil-room ratio for all students of:		
27.6 elementary and 26.3 secondary pupils	117,000	
27.4 elementary and 27.5 secondary pupils25 elementary and 20 secondary pupils		. 98,000 285,000
U.S. median pupil-room ratio:		an a
Elementary schools		27.4
Secondary schools	26.3	27.5

In view of the figures above, it seems reasonable to assume that there was very little change in the number of crowded and unsatisfactory rooms in the 1962-63 to 1966-67 period and that the rooms (97,000) completed in excess of those that could have been used for taking care of enrollment increases and current replacement (abandonments) were used primarily to take care of migration factors.

In 1964-65 the number of additional rooms needed to eliminate the use of off-site, nonpermanent, and improvised or makeshift rooms was 76,000 and the number for replacing rooms in buildings with 3 or more defects was 158,000. An additional 98,000 rooms were needed to permit all public school pupils to be in rooms with no more than 27 pupils. If they were to be accommodated in rooms with no more than 25 elementary or 20 secondary pupils, the additional number needed was 285,000. These figures are not intended to show the total additional rooms needed but are presented simply to show that the approximately 263,000 rooms which we assumed could be completed for reducing crowded and unsatisfactory rooms in the next 10 years fall far short of the number which could be built for this purpose.

Expenditures for interest by regular public elementary and secondary schools

Annual expenditures (in 1966-67 dollars) for interest by public elementary and secondary schools increased from \$333 million in 1956-57 to over \$949 million in 1966-67 and are expected to be almost \$1.5 billion in 1976-77. Projected interest is shown in table 40. The projections are based on the assumption that the 1956-57 to 1966-67 upward trend will continue through 1976-77. In spite of the fact that capital outlay is expected to level off in the next decade, this assumption seems reasonable because interest payments continue 20 years or more after construction, resulting in debt being incurred at a greater rate than it is being eliminated. The trend formula for projecting interest (y) in 1966-67 dollars was as follows: y' = \$293 + \$57t (t = time in years, t = 1 in 1956-57).

Expenditures for regular nonpublic elementary and secondary schools

Expenditure data for nonpublic elementary and secondary schools comparable to those for public schools are nonexistent. The main reason is that it is extremely difficult to arrive at a universally accepted method for determining the value of donated services for nonpublic schools, even if data on actual expenditures were collected. These donated services make up a substantial part of nonpublic school resources, especially in the elementary and secondary schools operated by religious orders. In fall 1962, over one-half of the 200,000 nonpublic school teachers belonged to religious orders of the Roman Cacholic Church. Also it might be argued that many of the remaining nonpublic school teachers, whose salaries generally run lower than those in public schools, really donated part of their services.

Although it is difficult to arrive at national estimates of nonpublic school expenditures that everyone will accept, the substantial contribution of nonpublic elementary and secondary schools cannot be ignored when we consider total expenditures for education. Therefore, illustrative estimates of nonpublic elementary and secondary school expenditures were developed rather arbitrarily and are shown in table 34. They are based on the assumption that the cost per teacher (including donated facilities and services) in nonpublic schools is the same as in public schools. The formula was as follows: y = xp (x = ratio of nonpublic to public school teachers, and p = public school expenditures). The ratio of nonpublic to public school teachers was slightly over 13 percent during the 1956 to 1966 decade and is expected to



remain the same during the 1967 to 1977 decade. The numbers upon which these ratios were computed are shown in table 27.

Previous Office of Education estimates were based on the assumption that per pupil costs in non-public were the same as in public schools. Since the average pupil-teacher ratio is higher in nonpublic than in public schools, the previous estimates were higher than those shown here. Both types of estimates are, in a sense, hypothetical. That is, one showed what it would cost to educate nonpublic elementary and secondary school children if they were enrolled in public school and if the public school pupil-teacher ratio were maintained; and the other type, shown in table 34, shows the cost if the pupil-teacher ratio were maintained at the nonpublic school level.

Another way in which nonpublic school contributions may be assessed is to treat them as personal consumption expenditures. Personal consumption expenditures for nonrublic elementary and secondary school services are reported annually in the Survey of Current Business, by the Office of Business Economics, U.S. Department of Commerce. These figures usually run about 30 percent lower than the estimates shown in table 35. The personal consumption expenditure for nonpublic elementary and secondary school services in 1964 was estimated at \$1.7 billion.

Current expenditures of institutions of higher education

Annual current expenditures of institutions of higher education (in 1966-67 dollars) increased from \$4.5 billion in 1956-57 to \$13.2 billion in 1966-67, almost a threefold increase. They are expected to reach \$25.3 billion by 1976-77, or nearly louble during the projected 10-year period. The projected data are based largely upon expected increases in enrollment and upon the trend of increasing costs per student expressed in constant dollars. Thus, while enrollment is not expected to increase at as rapid a rate as during the past 10 years, this factor will be more than offset by increasing expenditures per student. The result is an expected or projected constant dollar increase of \$12.1 billion over the next 10 years compared to a constant dollar increase of \$8.7 billion over the past 10 years (see table 41). When expressed in terms of current expenditures per full-time equivalent student, the data are as follows:

Item	1956-57	1966-67	1976-77
Total current expenditures	\$1,858	\$2,615	\$3,2 1 1
Publicly controlled institutions		2,222	2,575
Nonpublicly controlled institutions	1,892	3,414	4,870

Current expenditures are divided into four functional components: student education, related activities, organized research, and auxiliary enterprises and student aid. "Student education" encompasses general administration, instruction and departmental research, extension and public services, libraries, and operation and maintenance. Expenditures for student education were projected by use of the trend of annual expenditures per full-time equivalent student over the 10-year base period and in conjunction with the projected enrollment of such students (see table 41). When expressed in terms of current expenditure per full-time equivalent student, the data are as follows:

Item	1956-57	1966-67	1976-77
Current expenditures for student education		\$1,518	\$1,805
Publicly controlled institutionsNonpublicly controlled institutions		1,388 1, 7 82	1,558 2,450

Current expenditures for "student education," related activities, and organized research are commonly known as current expenditures for educational and general purposes and these expenditures per full-time equivalent student are as follows:

Item	1956–57	1966-67	1976-77
Expenditures for educational and general purposes Publicly controlled institutions Nonpublicly controlled institutions		\$2,199 1,898 2,812	\$2,597 2,100 3,896

The institutions of higher education engage in organized research and related activities and auxiliary enterprises in widely varying degrees. Thus, only the "student education" component expressed as expenditure per full-time equivalent student can be considered a norm for all institutions. Per student data for the United States for total current expenditures and for educational and general expenditures are presented as general interest items and not as institutional norms.

Related activities, auxiliary enterprises, and student aid expenditures were projected on the basis of their percentage relationship to student education during the base period. These functions are obviously closely related to trends in enrollment, but allowance had to be made for the change during the base period in their percentage relationship to student education. The base period data indicate a trend toward slightly more emphasis on these activities. The exception is expenditures for suxiliary enterprises in non-publicly controlled institutions which have decreased slightly during the base period in relation to student education.

Item	1956–57	1 96 6-6 7	1976-77	
Related activities:	Percent	Percent	Percent	
Publicly controlled institutions	9.58	10.10	10.36	
Nonpublicly controlled institutions	8.62	8.93	9.15	
Auxiliary enterprises:				
Publicly controlled institutions	26.5°	27.84	29.31	
Nonpublicly controlled institutions	33.49	31.19	29.13	
Student aid:				
Publicly controlled institutions	2.83	4.02	5.21	
Nonpublicly controlled institutions	7.46	10.45	13.33	

The projection of expenditures for organized research, as a component of current expenditures, was done without regard to enrollment or to relationship with expenditures for student education. In view of the extremely variable nature of this component's relation to industry and education, we have projected on the basis of the constant dollar trend of expenditures for organized research during the base period. This projection may well be quite conservative, especially for the publicly controlled institutions which undoubtedly have the potential to engage in organized research to a far greater degree than performance over the past 10 years would indicate (see table 41).

Capital outlay by institutions of higher education

Annual capital outlay of institutions of higher education (in 1966-67 dollars) increased from \$1.4 billion during 1956-57 to an estimated \$3.4 billion during 1966-67. Capital outlay over the entire 10-year base period of 1956-57 to 1966-67 amounted to an estimated total of \$25.0 billion and is expected to reach a total of \$26.7 billion over the 10-year projected period of 1966-67 to 1976-77.

Estimates of capital outlay were made on the basis of reported book value of plant at the beginning and end of each biennial reporting year and converted to 1966-67 dollars. An amount equal to 1 percent of the value of plant for each year was added as a conservative estimate of replacement and rehabilitation.

Projected capital outlay was based primarily on actual or expected increases in enrollment plus estimated expenditures for replacement and rehabilitation. This is not as straightforward a concept as it may seem. The historical data showed clearly that capital outlay could not be related to increased



enrollment on an annual basis. The shortest reasonably reliable period of time proved to be 5 years. Therefore, a moving average was used to arrive at an orderly annual projection based on annual enrollment increases. We would emphasize, then, that the annual capital outlay data shown in tables 34 and 43 are designed to be utilized in the context of . fitted curve.

Expenditures for interest by institutions of higher education

Data on expenditures for interest by institutions of higher education are incomplete and cannot be shown as a separate item. The major portion of expenditures for interest is included with the current expenditures shown in table 34.

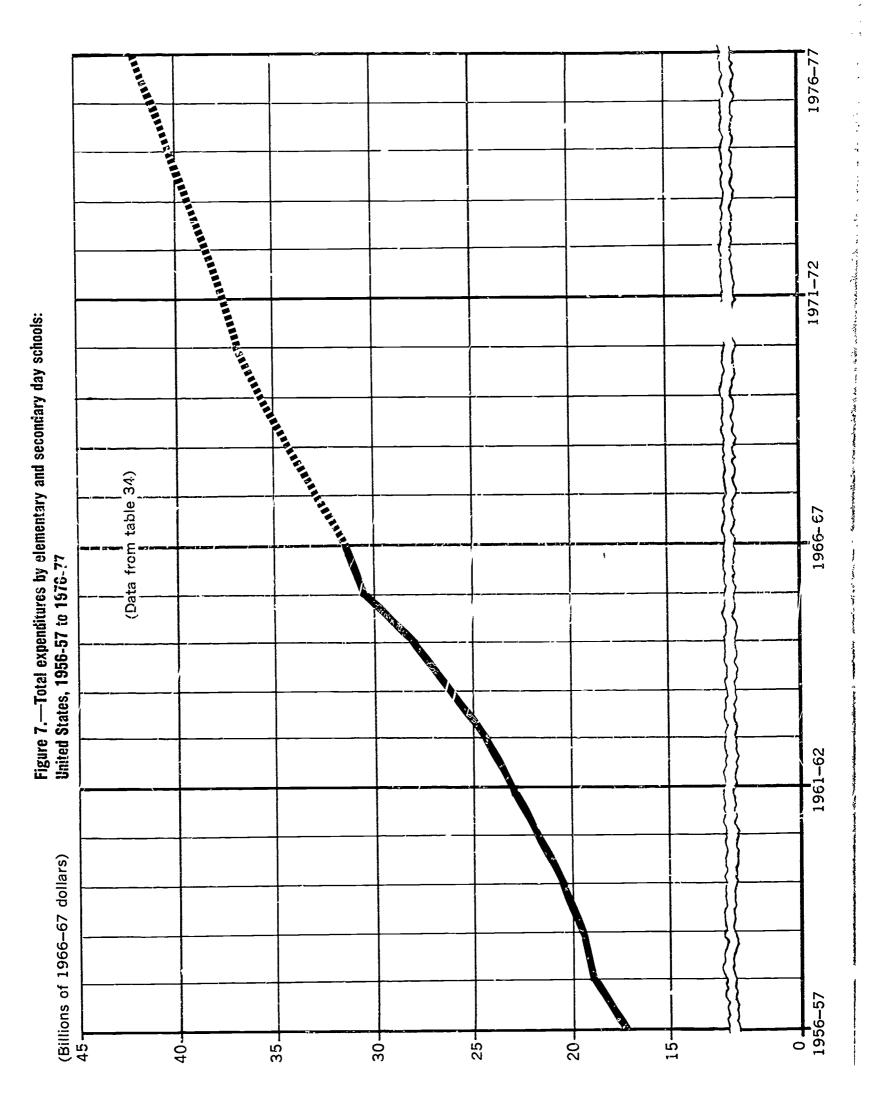


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The state of the s 1971-72 Figure 8.—Total expenditures by institutions of higher education: United States, 1956-57 to 1976-77 (Data from table 34) 1966-67 1961–62 (Billions of 1966-67 dollars) 1956-57 -92 287 22-20-18-14-10-8 -9 4 16-12-2 24-

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Table 34.—Expenditures by regular educational institutions, by level of instruction and by control: United Slates, 1956-57 to 1976-77 ¹

[In billions of 1966-67 dollars]

Year and control	Total (all levels)	timated o	y and secon lic school on the basis in public sc	expenditui of expend	res are es-		utions of hi ucation *	gher
	10 V(10) _	Total	Current expendi- tures 4	Capital outlay	Interest •	Totai	Current expend- itures 7	Capital outlay:
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1956–57:							- · ·	21.4
Total	\$23.3	\$17.4	\$12.5	\$4.6	\$0.3	\$5.9	\$4.5	\$1.4
Public	19.0	15.5	11.1	4.1	0.3	3.5	$\frac{2.6}{1.9}$	$\begin{array}{c} 0.9 \\ 0.5 \end{array}$
Nonpublic	4.3	1.9	1.4	0.5	(8)	2.4	1.9	0.0
1957-58:	ar 0	10.0	19 7	4.6	0.5	6.5	5.0	1.5
Total	25.3	18.8	13.7 12.1	4.1	$0.3 \\ 0.4$	3.7	2.8	0.9
Public	20.3	$\substack{16.6\\2.2}$	1.6	0.5		2.8	2.2	0.6
Nonpublic	5.0	ئد . ئ	1.0	0.0	0.1	2.0	2.2	0.0
1958–59:	26.1	19.0	14.8	3.6	0.6	7.1	5.5	1.6
Total	20.1	16.8	13.1	3.2		4.0	3.1	0.9
Public	5.3	$\frac{10.8}{2.2}$	1.7	0.4		3.1	2.4	0.7
Nonpublic	0.0	2.2	2	0.12	••-			
1959-60: Total	28.1	20.4	15.8	4.0	0.6	7.7	6.0	1.7
Public	22.3	18.0	14.0	3.5		4.3	3.3	1.0
Nonpublic.	5.8	2.4	1.8	0.5	0.1	3.4	2.7	0.7
1960-61:	0.0							
Total	30.5	21.8	17.1	4.0	0.7	8."	6.7	2.0
Public		19.2	15.1	3.5	J.6	4.7	3.6	1.1
Nonpublic		2.6	2.0	0.5	0.1	4.0	3.1	0.9
1961-62:							.	
Total	32.8	23.3		4.0		9.5	.5	
Public	258					5.3		
Nonpublic	7.0	2.8	2.2	0.8	0.1	4.2	3.4	0.8
1962-63:				4	- 00	11 9	C .1	2.9
Total		_				11.3 6.4		
Public						4.9		
Nonpublie	7.8	2.9	2.4	0.	4 0.1	4.5	0.0	1.1
1963-64:	00.4	00.0	01.4	4.	0 0.8	12.2	9.4	2.8
Total	_							
Public	_							
Nonpublic	. 8.5	0 0.2	, 2.0	, .	0 0.2			
1964-65:	_ 41.9	28.1	22.9	4.	3 0.9	13.8	3 10.3	3 3.5
Total								
Public Nonpublic		=						
-	_							
1935-66: Total	_ 45.9	30.4	4 25.9) 4.	5 0.9	15.	5 11.9	3.6
Public					.0 0.8	9.0		
Nonpublic					.5 0.1	6.	5 5.	2 1.3
1966-57:		-						
Total	48.	5 31.9	9 26.		.5 1.0			
Public			3 23.		0.0			
Nonpublic			6 3.	0 0	.5 0.1	6.9	9 5.	7 1.5

Table 34—Continued

Year and control	Total (all levels)	(Nonpul	y and secon plic school e on the basi in public scl	xpenditure of expend	s are es-	Institutions of higher education			
(1)	(2)	Total	Current expend- itures 4 (4)	Capital outlay 5	Interest (6)	Total	Current expend- itures 7 (8)	Capital outlay *	
		PR	OJECTE	D		_			
1967-68:	-	<u> </u>							
	50.	9 33.0	27.6	4.3	1.1	17.9	14.6	3.3	
						10.5	8.3	2.2	
Public				0.5	-	7.4	J.3	1.1	
Nonpublic	. 11.	$2 \qquad 3.8$	3.4	0.0	0.1	7.4	3.0	1.1	
1968-69:	E 9	9 94 9	28.8	4.3	1.1	19.0	15.9	3.1	
Total						11.0	9.0	$\frac{3.1}{2.0}$	
Public						8.0	6.9	2.0 1.1	
Nonpublic	. 11.	9 3.9	3.3	0.5	0.1	ð.U	0.9	1.1	
1969–70:	~ .	0 0 0		4.0	1.0	19.3	16.6	2.7	
Total				4.3			16.6 9.5		
Public						11.3		1.3	
Nonpublic	12.	0 4.0	3.4	0.5	0.1	8.0	7.1	0.9	
1970-71:		0.00		4.0		00.0	177	0.6	
Total		-				20.3 11.9	17.7	2.6	
Public							10.1	1.8	
Nonpublic	12.	7 4.3	3.6	0.5	0.2	8.4	7.6	0.8	
1971–72:	50	1 07 6	00.1	4.9	1 4	01.0	10.0	0.4	
Total				4.3		21.3	18.9 10.9	2.4 1.7	
Public						12.6	8.6	0.7	
Nonpublic	13.	1 4.4	3.7	0.5	0.2	8.7	0.0	0.7	
1972–73:	04	4 00 5	, ,,,,	4.0	1.5	22.7	20.3	0.4	
Total						13.3	20.5 11.6	$\frac{2.4}{1.7}$	
Public				3.8					
Nonpublic	_ 13.	9 4.8	5 3,,8	0.5	0.2	9.4	8.7	0.7	
1973–74:	00	0 00 (4.9	. 15	94.0	21.4	2.6	
Total						$24.0 \\ 14.1$	$\begin{array}{c} 21.4 \\ 12.3 \end{array}$	1.8	
Public						9.9	9.1	.8	
Nonpublic	. 14.	5 4.6	3.9	0.5	0.2	9.9	8,1	• •	
1974–75:	C.E	0 40 1	2 24 6	4.3	1 6	25.4	23.7	2.7	
Total						$\begin{array}{c} 25.4 \\ 15.0 \end{array}$		1.9	
Public									
Nonpublic	_ 15.	1 4.7	7 4.0	0.5	0.2	10.4	9.6	0.8	
1975–76:	00	0 41	4 05 5) 1 4	96 E	94 0	0.4	
Total						26.6 15.8		2.6 1.9	
Public						10.8		0.7	
Nonpublic	_ 15.	.7 4.	9 4.2	. U.	U. Z	10.8	10.1	0.4	
1976–77:	70	0 40	1 20	4.8	3 1.7	27.8	25.3	2.5	
Total						16.4			
Public						11.4			
Nonpublic	_ 16	.5 5.	1 4.4	1 0.	U.2	11.4	10.7	0.7	



¹ For sources of data and methodology, see tables 36, 38, 40, 41, 43 and appendix table D.

*Includes the effect of the Elementary and Secondary Education Act of 1965. Excludes expenditures for residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations. See text table on expenditures by source of funds for data on these schools. Expenditures for the school years ending in 1957, 1959, 1961, and 1963 are estimates based on enrollment changes and bond sales. Expenditures for 1964-65, 1965-66, and 1966-67 were based on estimates furnished by State departments of education. All nonpublic school expenditures shown here were estimated on the basis of expenditures per teacher in public elementary and secondary schools.

Includes expenditures for subcollegiate departments of institutions of higher education, estimated at \$85 million in 1965-66. Includes expenditures for interest from current funds and excludes interest paid from plant funds. (An estimated

\$158 million was expended for total interest in 1966-67.)

*Includes current expenditures of public elementary and secondary school systems for community services, summer schools, community colleges, and adult education. Interest is included in the estimated current expenditures of nonpublic schools.

Fincludes capital outlay of State and local school building authorities. See table 38.

• Expenditures for interest on public school debt were projected as a continuation of the 1954-55 to 1963-64 trend. Data for school years ending in 1957, 1959, 1961, and 1963 were interpolated.

7 Includes expenditures for interest from current funds. Excludes expenditures from current funds for capital outlay.

*The estimated capital outlay figures shown here include estimated expenditures for replacement and rehabilitation.

Less than \$50 million.

NOTE.—Data are for 50 States and D.C. for all years.

Table 35.—Expenditures by regular educational institutions, by level of instruction and by control: United States, 1956-57 to 1968-69 1

[In billions of current dollars]

Year and control	Total (all levels)	(Nonput	ary and se dic school on the basi n public so	expenditus of expend	Institutions of higher education ³			
(a) (1)	an ieveis)	Total	expend-	Capital outlay	Interest, 6	Total	Current expend- itures 7	Capital outlay *
	(2)	(3)	itures 4 (4)	(5)	(6)	(7)	(8)	(9)
1956–57:								
Total	_ \$19.1	\$14.2	\$10.5	\$3.4		\$4.9	\$3.8	\$1.1
Public		12.6	9.3	3.0	0.3	2.9	2.2	0.7
Nonpublic	3.6	1.6	1.2	0.4	(9)	2.0	1.6	0.4
195758:								4 1
Total	21.0	15.7	17.8	3.5		5.3	4.2	1.1
Public	_	13.8	10.4	3.1		3.1	2.4	$\begin{array}{c} 0.7 \\ 0.4 \end{array}$
Nonpublic	4.1	1.9	1.4	0.4	0.1	2.2	1.8	0.4
1958-59:						0.1	4.0	1.2
Total		16.2	12.9	2.8		6.1	$\frac{4.9}{2.8}$	0.7
Public		14.3	11.4			3.5	$\frac{2.8}{2.1}$	0.7
Nonpublic	4.5	1.9	1.5	0.3	0.1	2.6	2.1	0.5
1959-60:						c 7	5.4	1.3
Total		17.9	14.1			6.7	$\frac{3.4}{3.0}$	0.8
Public		15.8	12.5			$\frac{3.8}{2.9}$	2.4	0.5
Nonpublic	5.0	2.1	1.6	0.4	1 0.1	2.9	2.4	0.0
1960-61:						7.6	6.0	1.6
Total		19.3	15.4			$\frac{7.0}{4.2}$		
Public		17.0	13.6			$\frac{4.2}{3.4}$		
Nonpublic	5.7	2.3	1.8	0.	4 0.1	5.4	2.1	0
1961–62:					. 07	8.5	6.8	1.7
Total	_	20.9				4.7	-	
Public	_	18.5				3.8		
Nonpublic	6.2	2.4	1.9	0.	4 0.1	0.0	3.1	
1962-63:			10	, ,	1 07	10.3	7.8	2.
Total		22.2						•
Public						4.4		
Nonpublic	7.1	2.7	2.5	2 0.	4 0.1	4: -		, 0.,



Year and control	Total (all levels)	ll teacher in public schools)					Institutions of higher education *		
		Total	Current expend- itures 4	Capital out sy 5	Interest *	Total	Current expend- itures 7	Capital outlay *	
(1)	(Ž)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1963-64:	_								
Total	35.8	24.5	20.2	3.5	0.8	11.3	8.8	2.5	
Public		21.5		3.1	0.7	6.4	4.9	1.5	
Nonpublic		3.9		0.4	0.1	4.9	3.9	1.0	
1964-65:	,,,,	• • • • • • • • • • • • • • • • • • • •			•				
Total	39.6	26.5	21.7	4.0	8.0	13.1	9.9	3.2	
Public		2′ 3		3.5	ა.7	7.5	5.5	2.0	
Nonpublic		3.2		0.5	0.1	5.6	4.4	1.2	
1965–66: ¹⁰									
Total	44.5	29.6	24.4	4.:	0.9	14.9	11.5	3.4	
Public		26.1	21.5	3.8	0.8	8.7	6.5	2.2	
Nonpublic	9.7	3.5	2.9	0.5	0.1	6.2	5.0	1.2	
1966-67: 10									
Total	48.5	31.9	26.4	4.5	1.0	16.6	13.2	3.4	
Public		28.3		4.0	0.9	9.7	7.5	2.2	
Nonpublic	_	3.6		0.5	6.1	6.9	5.7	i.2	
		PR	OJECTE	D		-	<u></u>		
1967-68:10				——···					
Total	51.9	33.6	28.1	44	1.1	18.3	14.9	3.4	
Public	40.4	29.7	24.8	₹.9	1.0	10.7	8.5	2.2	
Nonpublic	11.5	3.9	3.3	0.5	0.1	7.6	6.4	1.2	
1968-69: 10									
Total	55.5	35.7	30.0	4.5	1.2	19.8	16.5	3.3	
Publis	43.3	31.7	26.6	4.0	1.1	11.6	9.4	2.2	
Nonpublic		4.0	3.4	0.5	0.1	8.2	7.1	1.1	

¹ For data sources and methodology, see footnotes on preceding table which shows these statistics in 1966-67 dollars.

schools, community colleges, and adult education. Interest is included in the estimated current expenditures of nonpublic schools.

^{*}Excludes expenditures for residential schools for exceptions' children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations. All nonpublic elementary and secondary school expenditures shown here are estimated on the basis of expenditures per teacher in public elementary and secondary schools.

³ Includes expenditures for subcollegiate departments of institutions of higher education, estimated at \$65 million in 1966-67. Includes expenditures for interest from current funds and excludes interest paid from plant funds. (An estimated \$158 million was expended for total interest in 1966-67.)

⁴ Includes current expenditures of public elementary and secondary school systems for community services, summer

⁵ Includes capital outlay of State and local school building authorities.

⁶ Interest for nonpublic schools is based on interest for public schools.

¹ Includes expenditures for interest from current funds. Excludes expenditures from current funds for capital outlay.

⁸The estimated annual capital outlay figures shown here include estimated expenditures for replacement and rehabilitation.

Less than \$50 million.

¹⁰ Includes effect of Elementary and Secondary Education Act of 1965.

NOTE.—All data are for 50 States and D.C.

Table 36.—Current expenditures of public school systems: United States, 1956-57 to 1976-77 13

		A	llocated to p	upil costs *		All pr	ograms4
Y ear	Average daily attendance (in thousands)	Per pu average atten	pil in daily dance	Total (ir	hillions)	Total (in	n billions)
(!)	(2)	Current dollars (3)	1966-67 dollars (4)	Current dollars (5)	1966-67 dollars (6)	Current dollars (7)	1966-67 dollars (8)
1956-57 5	28,801	\$314.62	\$374.18	\$9.1	\$ 10.8	\$ 9.3	\$ 11.1
1957-58	- , -	341.14	392.75	10.2	11.7	10.4	12.1
1958-59	•	357.71	406.25	11.2	12.7	11 4	13.1
1959-60	•	375.14	420.12	12.2	13.6	12.5	14.0
1960-61 5		396.50	438.33	13.3	14.7	13.6	15.1
1961-62	•	418.50	458.01	14.5	15.9	14.9	16.4
1962-63 5		439.00	474.69	15.8	17.0	16.2	17.5
1963-64	•	462.00	492.58	17.2	18.3	17.7	18.8
1964-65 5	38,500	484.00	50 9. 5 6	18.6	19.6	19.1	20.2
1965-66	39,200	532.00	548.00	20.9	21.5	21.5	22.1
1965-57 6	39,800	509.00	569.00	22.6	22.6	23.4	23.4
		ACTUAL					
1965–66	•	532.00	548.00		21.5	21.5	
1966-67 6	39,800	569.00	569.00	22.6	22.6	23.4	23.4
		Project	ED 7				
(Based on assumption	that current e	expenditure	per pupil	will be \$2	25 higher	than tre	n d)
1967-68							
	40,700	⁸ 593.00	583.00	8 24.1	23.7	8 24.8	
1968-69	•	8 593.00 8 622.00	583.00 600.00				24.4
	41,400			8 25.8	24.8	8 26.6	24.4 25.8
1968-69	41,400 42,000	$^8622.00$	600.00	8 25.8	$24.8 \\ 25.9$	8 26.6	24.4 25.3 26.7
1968-69 1969-70	41,400 42,000 42,400	8 622.00 	600.00 616.00	8 25.8	24.8 25.9 26.8	8 26.6	24.4 25.3 26.3 27.6
1968-69 1969-70 1970-71	41,400 42,000 42,400 42,500	8 622.00	600.00 616.00 633.00	8 25.8 	24.8 25.9 26.8 27.6	8 26.6	24.4 25.4 26.3 27.6 28.4
1968-69 1969-70 1970-71 1971-72	41,400 42,000 42,400 42,500 42,500	8 622.00 	600.00 616.00 633.00 650.00	8 25 .8	24.8 25.9 26.8 27.6 28.3	8 26.6	24.4 25.8 26.7 27.6 28.4 29.7
1968-69 1969-70 1970-71 1971-72 1972-73	41,400 42,000 42,400 42,500 42,500 42,500 42,500	8 622.00 	600.00 616.00 633.00 650.00	8 25 .8	24.8 25.9 26.8 27.6 28.3 29.0	8 26.6	24.4 25.3 26.3 27.4 28.4 29.5

4.2,400

733.00

See footnotes at end of table.



32.0

TABLE 36—Continued

B. EXCLUDES THE EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

	_	A	All prog	grams 4			
Year	Average daily attendance (in thousands)	daily Per pupil in endance average daily (in attendance			billions)	Total (in billions)	
(1)	(2)	Current dollars (3)	1966-67 dollars (4)	Current dollars (5)	1966-67 dollars (8)	Current dollars (7)	1966-67 dollars (8)
	:	Estimated	9				
1965-66	39,200	509.00	525.00	20.0	20.6	20.6	21,2
1966-67 6	39,800	536.00	536.00	21.3	21.3	21.9	21.9

(Based on continuation of 1955-56 to 1964-65 trend in current expenditure per pupil)

40,700	8 567.00	558.00	⁸ 23.1	22.7	⁸ 23.8	23.4
41,400	⁸ 596.00	575.00	8 24.7	23.8	8 25.4	24.5
42,000		591.00		24.8		25.5
42,406		608.00		25.8		26.6
42,500		625.00		26.6		27.4
42,500		642.00		27.3		23.1
42,500		658.00		28.0		28.8
42,400		675.00		28.6		29.5
42,400		692.00		29.3		30.2
42,400		708.00		30.0		30.9
	41,400 42,000 42,406 42,500 42,500 42,500 42,400 42,400	42,000	41,400 \$ 596.00 575.00 42,000 591.00 42,406 608.00 42,500 625.00 42,500 642.00 42,500 658.00 42,400 675.00 42,400 692.00	41,400 \$ 596.00 575.00 \$ 24.7 42,000 591.00 42,400 42,400 608.00 42,500 42,500 625.00 642.00 42,500 658.00 675.00 42,400 692.00 692.00	41,400 \$ 596.00 575.00 \$ 24.7 23.8 42,000 591.00 24.8 42,406 608.00 25.8 42,500 625.00 26.6 42,500 642.00 27.3 42,500 658.00 28.0 42,400 675.00 28.6 42,400 692.00 29.3	41,400 \$596.00 575.00 \$24.7 23.8 \$25.4 42,000 591.00 24.8 24.8 24.8 24.8 24.8 25.8 25.8 25.8 25.8 26.6 26.6 26.6 27.3 27.

1 SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems, Biennial Survey of Education in the United States," ch. 2 (1955-56 and 1957-58); (2) "Statistics of State School Systems" circulars (1959-60 and 1963-64); and (?) 'Statistics of Public Schools," fall 1964 through 1966. Current expenditures were converted to 1966-67 dollars on the basis of the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. For riethod of converting, see appendix table K.

The expenditures shown in this table include current expenditures for administration for State boards of education, State departments of education, and intermediate administrative units. Therefore, they are higher than those that exclude such expenditures.

Includes only the current expenditures for public day schools allocated to pupil costs, and excludes the other expenditures shown in footnote 4.

*Includes current expenditures for summer schools, adult education, and community colleges operated by school districts, in addition to expenditures allocable to pupil costs.

Estimated on the basis of actual enrollment and interpolated expenditures per pupil.

Derived from estimates furnished by States.

The projections of current expenditures of pullic school systems including the effect of the Elementary and Secondary Education Act of 1965 are based on the assumptions: (1) The ratio of average daily attendance to fall enrollment in grades K-12 of public schools (table 3) will remain constant at the 1966-67 level of 92.7 percent; (2) current expenditures allocated to costs per pupil in average daily attendance will follow the 1957-57 to 1964-65 trend, (2) the ratio of current expenditures for all programs to current expenditures allocated to pupil costs will remain constant at the 1966-67 level of 1.03; and (4' an increase in expenditures of \$2' per pupil will be added to the trend expenditures outlined above due to funds provided by the Elementary and Secondary Education Act of 1965.

Base i on the assumption that the Consumer Frice Index will follow the 1963-64 to 1966-67 trend through 1968-69.

• Estimated, using the 1955-56 to 1964-65 trend.

he projections of current expenditures of public school on an excluding the effect of the Elementary and Secondary unation Act of 1965 are based on the first three assumptions where different resources are the secondary to the first three assumptions are the secondary to the first three assumptions are the secondary to the first three assumptions are the secondary to the secondary three secondary to the secondary three seconda

or methodological details see appendix D and discussion in text.

NOTE.—Data are for 50 States and the District of Columbia for all years.



Table 37.—Current expenditures for salaries of instructional staff in regular public elementary and secondary day schools: United States, 1956-57 to 1976-77 1

	Number of _	Sal	laries of instru	uctional staff	
i	nstructional staff ² (in thousands)	Average ann	ual salary	Total (in b	oilions)
(1)	(2)	Current dollars (3)	1966-67 dollars (4)	Current dollars (5)	1966-67 dollars (6)
		•			
1956–57 4	1,289	\$4,430	\$ 5,269	\$5.7	\$6.8
1957–58	1,356	4,702	5,413	6.4	7.3
1958-59 4	1,411	4,940	5,610	7.0	7.9
1959-60	1,468	5,174	5,794	7.7	8.5
1960-61 4	1,529	5,440	6,014	8.3	9.2
1961–62	1,591	5,700	6,238	9.2	9.9
1962-63 '	1,648	5,930	6,412	9.8	10.6
1963-64	1,728	6,170	6,580	10.7	11.4
1964-65 5	1,810	6,400	6,738	11.6	12.2
1965-66 5	1,883	6,700	6,900	12.7	13.0
1966-67 5	1,976	7,100	7,100	14.0	14.0
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N			IDARY EI	DUCATION	ACT OF
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N	UMBER O		ODARY EI 6,900	DUCATION	
A. INCLUDES EFFECT OF THE ELEMEN	1,883	F STAFF			13.0
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N 1965 ON N 1965-66 5 1966-67 5 19	1,883	6,700	6,900	12.7	13.0 14.0
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N 1965 ON N 1965-66 5 1966-67 5 PRO	1,883 1,976	6,700 7,100	6,900 7,100	12.7	13.0
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON NO. 1965–66 5 1966–67 5 Pro-	1,883 1,976 OJECTED 6	6,700 7,100	6,900 7,100 7,300	12.7 14.0	13.0
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N 1965-66 5 1966-67 5 PRO	1,883 1,976 OJECTED 6 2,042 2,102	6,700 7,100 7,400 77,800	6,900 7,100	12.7 14.0	13.0 14.0 14.1 15.
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N 1965-66 5 1966-67 5 PR6	1,883 1,976 OJECTED 6 2,042 2,102 2,158	6,700 7,100 7,400 77,800	7,300 7,500 7,700	12.7 14.0	13.0 14.0 14.1 15.
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N 1965-66 5 1966-67 5 PROTECT OF THE ELEMENT 1967-68 1968-69 1969-70 1970-71	1,883 1,976 GJECTED 6 2,042 2,102 2,158 2,191	6,700 7,100 7,400 77,800	7,300 7,700 7,700 7,900	12.7 14.0	13.0 14.0 14.1 15. 16.
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N 1965-66 5 1966-67 5 PROTECT OF THE ELEMENT 1968-69 1969-70 1970-71 1970-71 3971-72	1,883 1,976 0JECTED 6 2,042 2,102 2,158 2,191 2,217	6,700 7,100 7,400 77,800	7,300 7,500 7,900 8,100	12.7 14.0	13.0 14.0 14.1 15. 16. 17.
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N 1965-66 5 1966-67 5 PR6 1967-68 1968-69 1969-70 1970-71 1971-72 1971-73 1	1,883 1,976 0JECTED 6 2,042 2,102 2,158 2,191 2,217 2,241	6,700 7,100 7,400 77,800	7,300 7,500 7,700 7,900 8,100 8,300	12.7 14.0	13.0 14.0 15. 16. 17. 18.
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N 1965-66 5 1966-67 5 PRO 1967-68 1968-69 1969-70 1970-71 1971-72 1972-73 1973-74 1973-74	1,883 1,976 0JECTED 6 2,042 2,102 2,158 2,191 2,217 2,241 2,266	6,700 7,100 7,100	7,300 7,500 7,700 7,900 8,100 8,300 8,500	12.7 14.0	13.0 14.0 15 16. 17 18. 19.
A. INCLUDES EFFECT OF THE ELEMENT 1965 ON N 1965-66 5 1966-67 5 PR6 1967-68 1968-69 1969-70 1970-71 1971-72 1971-73 1	1,883 1,976 1,883 2,042 2,102 2,158 2,191 2,217 2,241 2,266 2,299	6,700 7,100 7,400 77,800	7,300 7,500 7,700 7,900 8,100 8,300 8,500 8,700	12.7 14.0	13.0 14.0 15 16. 17. 18. 19.

TABLE 37-Continued

B. EXCLUDES EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 ON NUMBER OF STAFF

	Number of	Salaries of instructional staff*						
Year	instructional staff ² (in thousands)	Average and	ual salary	Total (in billions)				
(1)	(2)	Current dollars (3)	1966-87 dollars (4)	Current dollars (5)	1966-67 dollara (6)			
Es	TIMATED 8							
1965–66 ⁵	,	6,700 7,100	6,900 7,100	12.4 13.5	12.8 13.5			
PR	OJECTED 9							
1967-68	1,964	′ 7,400	7,300	⁷ 14.5	14.3			
1968-69		77,800	7,500	7 15.7	15.1			
1969–70	2,058		7,700		15.8			
1970-71	2,091		7,900		16.5			
1971–72			8,100		17.1			
1972-73	•		8,300		17.8			
1973-74	•		8,500		18.4			
1974–75	, -		8,700		19.1			
1975–76	•		8,800		19.6			
1976–77	2,264		9,000		20.4			

¹ Source and method: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems, Biennial Survey of Education in the United States," et. 2 (1955-56 through 1957-58); (2) "Statistics of State School Systems" circulars (1959-66 through 1963-64); and (3) "f tatistics of Public Schools," fall 1964 through 1966.

Conversion to 1966-67 dollas was based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. For method of converting see appendix table K.

- ² Data on number of instructional staff were taken from table 27.
- The average annual salaries of instructional staff are about 3 percent higher than the salaries of class:coom teachers.
- ⁴ Interpolated.
 ⁵ Estimates of salaries furnished by State education
- departments.

 The projections of current expenditures for salaries of instructional staff in public elementary and secondary schools,

including the effect of the Elementary and Secondary

Education Act of 1965, are based on the following assumptions: (1) Average annual salaries will follow the 1955-56 to 1965-66 trend; (2) the atio of instructional staff to classroom teachers in regular public schools will follow the 1955-64 trend (see tables 23 and 27); and (3) funds provided by the Elementary and Secondary Education Act of 1965 will increase the number of instructional staff over the number expected from the 1955-56 to 1965-66 trend by approximately 80,000 in fall 1967, 90,000 in 1968, and 100,000 each year, 1967 through 1976.

- 7 Based on the assumption that the Consumer Price Index will follow the 1963-64 to 1966-67 trend through 1968-69.
 - *Estimated, using the 1955-56 to 1964-65 trend.
- The projections of current expenditures for salaries of interactional staff in public elementary and secondary schools, excluding the effect of the Elementary and Secondary Fducation Act of 1965, are based on the first two assumptions rathroad in footnote 6 above.

For methodological deta s, see appendix table D.

NOTE.—Data are for 50 States and the District of Columbia for all years.



Table 38.—Construction of public elementary and secondary school classrooms and capital outlay: United States, 1956-57 to 197 7 1

[Capital outlay includes expenditure of public school building authorities]

		Fiscal _	School year carital outlay2							
Year	Rooms	year bond sales in	C	Current dollars		1966-67	dollars			
700	completed	millions of current dollars	Percent of bond sales	Total in millions	Per room	Total in millions	Par room			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)			
	68,660	\$1,870	160	\$2,990	\$43,500	\$4,100	\$59,700			
8	72,070	2,420	128	3,104	43,100	4,100	56,900			
1958-59 *	-	1,948	128	2,500	36,000	3,200	46,000			
1959-60		2,198	128	2,823	40,700	3,500	50,400			
1960-61 4		2,357	122	2,900	40,200	3,500	48,500			
1961-62		2,568	116	2,987	41,400	3,500	48,600			
1957-58 to	, _,,	,		-						
1961-62	355,316	11,491	125	14,314	40,300	17,800	50,100			
1962-62 8	65,300	2,274	119	2,700	41,300	3,100	47,500			
1963-64	•	2,570	121	3,116	45,000	3,500	50,500			
1964-65 6		2,823	125	3,500	53,700	3,800	58,300			
1965-66 6		2,883	132	3,800	52,300	4,000	55,100			
1966-67 6		8 3,000	133	4,000	53,300	4,000	53,300			
1962-63 to				4 1 4 4 4 4 4	40.000	10 400	70.000			
1966-67	. 347,400	13,550	126	17,116	49,300	18,400	53,000 			
		Projec	TED 9							
			G _		45					
1967-68				10 3,900	¹⁰ 54,900	3,800	54,000			
1968-69					¹⁰ 56, 300	3,800	54,000			
1969-70	•					3,800	54,000			
1970-71	71,000						54,000			
1971–72	71,000					_ 3,800	54,000			
1967-68 to 1971-72	355,000					_ 19,000	54,000			
1070 79							54,000			
1972–73 1973–74						-	54,000			
1974-75							54,000			
1975-76							54,000			
1976-77	71 000						54,000			
1972-73 to	-					•	-			
1976-77	DEE MAN					19 000	54,00			

See footnotes next page.



1 SOURCES: Data are based on statistics shown in U.S Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems, Biennial Survey of Education in the United States, ' ch. 2 1957-58; (2) "Enrollment, Teachers, and Schoolhousing" (fall 1957 to fall 1963); (3) "Statistics of Public Schools," fal! 1964 through 1966 (4) "Bond Sales for Public School Purposes" (1960-61 to 1965-66). Conversion to 1966-67 dollars was based on the American Appraisal Co. Construction Cost Index. For method of converting, see appendix table K.

2 In 1961-62, 2 percent of capital outlay was estimated to be for transportation equipment, 10 percent for other equipment, and the remaining 88 percent for land and buildings.

³ Capital outlay was estimated at 128 percent of bond sales, the average for 1957-58 and 1959-60.

4 Capital outlay was estimated at 122 percent of bond sales, the average for 1959-60 and 1961-62.

⁵ Capital outlay was estimated at 119 percent of bond sales, the average for 1961-62 and 1963-64.

Capital outlay was estimated by State departments of education.

7 Number of rooms completed was estimated on the basis of State estimates of capital cutlay and the Office of Education estimate of capital outlay per room.

* Bond sales were estimated on the basis of data for the first half of 1966-67.

Projections of construction of public elementary and secondary school classrooms and of capital outlay are based on the assumptions: (1) The total number of rooms constructed will be 71,000 per year, projected on the basis of the 1957-58 to 1966-67 trend; and (2) the capital outlay per room will remain constant at the 1965-60 and 1966-67 average of \$54,000 per room in 1966-67 dollars.

10 Based on the assumption that the Construction Cost Index will follow the 1963-64 to 1966-67 trend through

For further methodological details, see appendix table D. NOTE.—Data are for 50 States and the District of Columbia for all years.

Table 39.—Construction of public elementary and secondary school classrooms and capital outlay, by reason for construction: United States, 1957-58 to 1976-77 1

	Number of classrooms ²							
Reason for construction	Estima	ated	Projected					
(1)	1957-58 to 1961-62 (2)	1962-63 to 1966-67 (3)	1967-68 to 1971-72 (4)	1972-73 to 1976-77 (5)				
Total	355,000	347,000	355,000	355,000				
Increased enrollment (1966 standard)Current replacement (abandonments), migration, consolidation of school districts, reduction of crowded and	197,000	164,000	65,000					
unsatisfactory rooms, and other factors	158,000	183,000	290,000	355,000				
	Capital outlay a of public elementary a secondary school systems and State a local public school building authorities							
	(In l	billions of 1	.966-67 dol	lars)				
Total	\$17.8	\$18.4	\$19.0	\$19.0				
Increased enroilment (1966 standard)Current replacement (abandonments), migration, consolidation of school districts, reduction of crowded and	9.9	8.7	3.5					
unsatisfactory rooms, and other factors	7.9	9.7	15.5	19.0				

¹ For sources of data and method of projecting total number in appendix table D. of classrooms to be constructed and total amount of capital outlay required for this purpose, see footnotes to table 38 and footnotes 19 to 21 in appendix table D.

^{*} For method of prejecting the number of classrooms to be constructed by reason for construction, see footnotes 22 to 25

For method of projecting capital outlay required by reason for construction, see footnotes 26 and 27 in appendix

NOTE.—Data are for 50 States and the District of Columbia for all years.

Table 40.—Expenditures for interest by public elementary and secondary school systems: United States 1956-57 to 1976-771

[In millions]

Year	_	Total interest payments to housing authorizing authori	school- orities or
Tear	(1)	Current dollars (2)	1966-67 dollars (3)
		\$280	\$ 333
956–57 3			398
957–58			475
958–59 *			549
959-60			590
			64
.961-62		065	69
962-63 2			73
963-64 *			78
964–65 *			84
	- 		94
1966-67 3	PROJECTED 4		
1007 60		5 1,000	97
1907 - 00 1060-60		5 1,100	1,0
1060_70			1,0
1070_71			1,1
1071-72			1,2
1972–73			1,2
1073_74			1,3
1074-75			1,3
1075_76			1,4
1976-77			1,4

¹ SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," 1955-56 to 1961-62; and (2) "Statistics of Public Schools," fall 1964 through fall 1966. Conversion to 1966-67 dollars was based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor For method of converting, see appendix table K.

Interpolated.

For methodological details, see appendix table D. NOTE.—Data are for 50 States and the District of Columbia for all years.

Estimates furnished by State education departments.

⁴ Projections of expenditures for interest are based on the assumption that these expenditures will follow the 1956-57 to 1966-67 trend.

^{*}Based on the assumption that the Consumer Price Index will follow the 1963-64 to 1966-67 trend through 1968-69.

Table 41.—Expenditures from current funds and total current expenditures (1960-67 dol'ars) by institutions of higher education: United States, 1956-57 to 1976-77 1

[Amounts in billions of 1966-87 dellars]

_	Ехре	nditure for general I	education a ourposes	ond 	Expendi- ture for auxiliary	Total expendi-	Capital outlay	Total current expendi-
	Student education ²	Organized research (3)	Related activities 1	Total	enter- prises and student aid (6)	tures from current funds (?)	from current funds only (8)	tures •
(1)								
1956- 57 : ⁶				00 F	21.0	<i>01</i> 7	en 9	\$ 4.5
Total	\$2.9	\$ 0.5	\$0.3	\$3.7	\$1.0	\$4.7	\$0.2	2.6
Public	1.7	0.3	0.2	2.2	0.5	2.7	0.1	1.9
Nonpublic	1.2	0.2	0.1	1.5	0.5	2.0	0.1	1.9
1957-68.						- 0	0.0	5.0
Total	3.1	0.8	0.3	4.2	1.0	5.2	0.2	
Public	1.8	0.4	0.2	2.4		2.9	0.1	2.8
Nonpublic	1.3	0.4	0.1	1.8	0.5	2.3	0.1	2.2
1958-59: 6								
Total	3.4	1.0	0.3	4.7	1.1	5.8	0.3	5.5
Public	2.0	0.5	0.2	2.7		3.3	0.2	3.1
Nonpublic	1.4	0.5	0.1	2.0	მ.5	2.5	0.1	2.4
1959-60:								
Total	3.6	1.2	0.3	5.1	1.2	6.3	0.3	6.0
Public		9.6	0.2	2.9	0.6	3.5	0.2	3.3
Nonpublic.		0.6	0.1	2.2	0.6	2.8	0.1	2.7
1960–61: 6								
Total	3.8	1.4	0.4	5.6	1.4	7.0	0.3	6.7
Public		0.7	0.2	3.1	0.7	3.8	0.2	3.6
		0.7	0.2	2.5	0.7	3.2	0.1	3.1
Nonpublic	1.0	•••	••-					
1961-62:	4.3	1.6	0.4	6.3	1.5	7.8	0.3	7.5
Total		0.8	0.2	3.5		4.3	0.2	4.1
Public		0.8	0.2	2.8		3.5	0.1	3.4
Nonpublic	. 1.0	0.0	0.2		,			
1962–63: 6	4.0	1.8	0.5	7.2	1.6	8.8	0.4	8.4
Total		0.8		4.0		4.8		4.6
Public		1.0		3.2		4.0		3.8
Nonpublic	2.0	1.0	0.2	0.2	. 0.0			
1963-64:	- 0	0.1	0.5	7.9	1.9	9.8	0.4	9.4
Total		2.1		4.4	_			5.2
Public	3.1	1.0		3.	-			
Nonpublic	_ 2.2	1.1	0.2	0.6	J 0.0	1.1	0.2	
1964–65: ⁷		o ()		0	8 2.1	10.9	0.6	10.
Total	_ 6.0			8.	_			
Public				5.				
Nonpublic	_ 2.4	1.2	0.2	3.	8 1.0	4.0	0.2	x. (
1.965-66: ⁷						10.5	0.6	11.
Total	6.9							
Public	_ 4.2							
Nonpublic		1.5	3 0.3	4.	3 1.1	5.4	t U.2	J.
1966-67:7			_			. 10	n 0.4	13.
Total	7.7							
Public					4 1.5			
Nonpublic		0 1.	4 0.3	4.	.7 1.5	5.9	9 0.2	2 5.

TABLE 41—Continued

	Ехре	enditure for general p	education a purposes	nd 		Total expendi-	Capital outlay from	Total current expendi-
Year and control (1)	Student education ² (2)	(.ganized research (3)	Related activities *	Total	enter- prises and student aid (6)	tures from current funds (7)	current funds only (8)	tures.
		PRO	JECTED	8				
1967–68:								• • •
Total	8.4	3.0	0.8	12.2		15.2	0.6	14.6
Public	5.2	1.4	0.5	7.1		8.7	0.4	8.3
Nonpublic	3.2	1.6	0.3	5.1	1.4	6.5	0.2	6.3
1968-69:								
Total	9.2	3.1	0.9	13.2		16.5	0.6	15.9
Public	5.6	1.4	0.6	7.6		9.4	0.4	9.0
Nonpublic	3.6	1.7	0.3	5.6	1.5	7.1	0.2	6.9
1969–70:								
Total	9.6	3.3	0.9	13.8	3.4	17.2	0.6	16.6
Public	5.9	1.5	0.6	8.0	1.9	9.9	0.4	9.
Nonpublic	3.7	1.8	0.3	5.8	1.5	7.3	0.2	7.
1970–71:								
Total	10.1	3.5	1.0	14.6	3.7	18.3	0.6	17.
Public		1.6	0.6	8.4	2.1	10.5	0.4	10.
Nonpublic		1.9	0.4	6.2	1.6	7.8	0.2	7.
1971–72:	0.0							
Total	10.7	3.7	1.1	15.5	3.9	19.4	0.5	18.
Public		1.7	0.7	9.0		11.2	0.3	10.
Nonpublic		2.0	0.4	6.8		8.2	0.2	8.
1972-73;	7.1	2.0	• • • •					
1972-75. Total	11.4	4.0	1.1	16.6	3 4.1	20.7	0.4	20.
Public		1.8	0.7	9.6	_		0.3	11.
		2.2	0.4	7.0	=		0.1	8.
Nonpublic	. 1.1	2.2	0.1	• • •				
1973-74:	12.1	4.2	1.2	17.	5 4.5	22.0	0.6	21.
Total		1.9		10.				
Public				7.				
Nonpublic	. 4.0	2.0	0.1	•••		• • • • • • • • • • • • • • • • • • • •		
1974–75:	12.9	4.4	1.2	18.	5 4.8	23.3	0.6	22.
Total		2.0		10.				
Public	_	2.0 2.4		7.				
Nonpublic.	4.9	2.4	0.4	• •	. 2.1	0.0	•••	
1975–76:	10 5	4 6	1.4	19.	5 5.1	24.6	0.6	24.
Total				11.				
Public								
Nonpublic	5.1	2.5	0.5	8.	1 4.4	, 10.0	0.2	10.
1976-77:		4 ^		90	E E 9	3 25.8	0.5	25.
Total				20.				
Public				12.				
Nonpublic	_ 5.3	2.7	0.5	8.	5 2.3	3 10.8	0.1	13.

See footnotes next page.

1 SOURCES: Data are based on statistics in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) Statistics of Higher Education, Biennial Survey of Education in the United States, chapter 4, 1955-56 and 1957-58; (2) Financial Statistics of Higher Education, 1959-60, 1961-62, and 1963-64 surveys; and (3) unpublished data in the Office of Education. Conversion to 1966-67 dollars was based on the Consumer Price Index published by the Bureau of Labor Statistics, United States Department of Labor and (for capital outlay) on the American Appraisal Company Construction Cost Index. For method of converting the indexes, see appendix table K.

² Includes general administration, instruction and departmental research, extension and public services, libraries, and operation and maintenance of the physical plant.

Includes expenditures for such items as laboratory schools, medical school haspitals, dental clinics, home conomics cafeterias, agricultural college creameries, college-operated industrial plants connected with instructional programs but not actually integral parts of it, etc.

⁴ Auxiliary enterprises include student dormitories, dining halls, cafeterias, student unions, bookstores, faculty housing, athletic programs not part of the instructional program, lectures, concerts, etc.

Student aid consists of scholarships, fellowships, and prizes and includes remission of fees.

⁵ Current-fund expenditures less capital outlay from current funds.

Interpolated.

7 Estimated.

*The projections of expenditures from current funds are based on the assumptions: (1) Expenditure per student and the percent of college-age persons attending college, on which expenditures for student education depend, will continue to increase as they did during the years 1956-57 to 1966-67; (2) expenditures for organized research will follow the 1956-57 to 1966-67 trend; (3) the relationship to student education of expenditures for related activities, for auxiliary enterprises, and for student aid will each continue the 1956-57 to 1966-67 trend; and (4) the 1966-67 to 1976-77 expenditures from current funds for capital outlay will approximate 16 percent of total capital outlay.

For methodological details, see appendix table D. NOTE.—Data are for 50 States and the District of Columbia for all years.

TABLE 42.—Expenditures from current funds and total current expenditures (current dollars) by institutions of higher education: United States, 1956-57 to 1968-69 1

[Amounts in billions of current dollars]

	Expe		educationa purposes	l and	Expendi- ture for auxiliary	Total expendi-		Total current
Year and control	Student	Organized	Related	Total	enter- prises and	turesfrom	from current	expendi- tures
(1)	education ² (2)	research (3)	activities ³ (4)	(5)	student aid (6)	funds (7)	funds only (8)	
1956–57: 6				_			_	
Total	\$2.4	\$0.5	\$0.3	\$3.2	\$6.8	\$4.0	\$0.2	\$ 3.8
Public	1.4	0.3	0.2	1.9	0.4	2.3	0.1	2.2
Nonpublic	1.0	0.2	0.1	1.3	0.4	1.7	0.1	1.6
1957-58:								
Total	2.6	0.7	0.3	3.6	0.8	4.4	0.2	4.2
Public	1.5	0.4	0.2	2.1	0.4	2.5	0.1	2.4
Nonpublic	1.1	0.3	0.1	1.5	0.4	1.9	0.1	1.8
1958-59: 6								
Total	29	0.9	0.3	4.1	1.0	5.1	0.2	4.9
Public	1.7	0.5	0.2	2.4	0.5	2.9	0.1	2.8
Nonpublic		0.4	0.1	1.7	0.5	2.2	0.1	2.1
1959-60:								
Total	3.2	1.0	0.3	4.5	1.1	5.6	0.2	5.4
Public	1.9	0.5	0.2	2.6	0.5	3.1	0.1	3.0
Nonpublic	1.3	0.5	0.1	1.9	0.6	2.5	0.1	2.4
1960-61: 6								
Total	3.6	1.2	0.3	5.1	1.2	6.3	0.3	6.0
Public	2.1	0.6	0.2	2.9	0.6	3.5	0.2	3.3
Nonpublic		0.6	0.1	2.2	0.6	2.8	0.1	2.7
1961-62:								
Total	3.9	1.5	0.3	5.7	1.4	7.1	0.3	6.8
Public	2.3	0.7	0.2	3.2	0.7	3.9	0.2	3.7
Nonpublic	1.6	0.8	0.1	2.5	0.7	3.2	0.1	3.1



Table 42—Continued

	Exp		r education purposes	and	Expendi- ture for auxiliary	Total expendi-	Capital outlay	Total current
Year and control (1)		Organized research (3)	Related activities ²	Total (5)		tures from current	from current funds only (8)	expendi- tures ⁵
	(-)							
1962-63: 6								
Total	4.4	1.7	0.5	6.6	1.6	8.2	0.4	7.8
Public	2.6	0.8	0.3	3.7	0.8	4.5	0.2	4.3
Nonpublic	1.8	0.9	0.2	2.9	0.8	3.7	0.2	3.5
1963-64:								
Total	5.0	1.9	0.5	7.4	1.8	9.2	0.4	8.8
Public		0.9	0.3	4.2	0.9	5.1	0.2	4.9
Nonpublic		1.0	0.2	3.2		4.1	0.2	3.9
1964–65: 7								
Total	5.7	2.1	0.6	8.4	2.1	10.5	0.6	9.0
Public		1.0	0.4	4.8	1.1	5.9	0.4	5.5
Nonpublic	-	1.1	0.2	3.6		4.6	0.2	4.4
1965–66: 7								
Total	6.7	2.4	0.6	9.7	2.4	12.1	0.6	11.5
Public		1.1	0.4	5.6	1.3	6.9	0.4	6.5
Nonpublic		1.3	0.2	4.1		5.2	0.2	5.0
1966-67: 7								
Total	7.7	2.6	0.8	11.1	2.7	13.8	0.6	13.2
Public		1.2	0.5	6.4		7.9	0.4	7.5
Nonpublic	_		0.3	4.7		5.9	0.2	5.7
		PRO	JECTEL	3				
1967-68:				_				
Total	8.6	3.0	0.8	12.4	3.1	15.5	0.6	14.9
Public	. 5.3	1.4	บ.5	7.2	1.7	8.9	0.4	8.5
Nonpublic	3.3	1.6	0.3	5.2	1.4	6.6	0.2	6.4
1968-69:								
Total	_ 9.5	3.3	0.9	13.7	3.4	17.1	0.6	16.5
Public				7.9	1.9	9.8	0.4	9.4
Nonpublic				5.8	3 1.5	7.3	0.2	7.1

1 SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education, publications: (1) Statistics of Higher Education, Biennial Survey of Education in the United States, chapter 4, 1955-56 and 1957-58; (2) Financial Statistics of Higher Education, 1959-60, 1961-62, and 1963-64 surveys; and (3) unpublished data in the Office of Education.

² Includes general administration, instruction and departmental research, extension and public services, libraries, and operation and maintenance of the physical plant.

*Includes expenditures for such items as laboratory schools, demonstration schools, medical school hespitals, dental clinics, home economics cafeterias, agricultural college creameries, college-operated industrial plants connected with instructional programs but not actually integral parts of it, etc.

4 Auxiliary enterprises include student dormitories, dining halls, cafeterias, student unions, bookstores, faculty housing, athletic programs not part of the instructional program, lectures, concerts, etc. Student aid consists of scholarships, fellowships, and prizes and includes remission of fees.

⁵ Current-fund expenditures less capital outlay from current funds.

- Interpolated.
- 7 Estimated
- * Projected by applying the 1963-64 to 1966-67 trend in the Consumer Price Index to the projected expenditures from current funds (table 41).

For methodological details, see appendix table D.

NOTE.—Data are for 50 States and D.C. for all years.



Chapter V

Basic Student Charges by Institutions of Higher Education

Kenneth A. Simon and C. George Lind

Explanation and definition

The source for estimated basic student charges (tuition and required fees, board, and room) was the published charge by individual institutions to a resident full-time degree-credit student for these services and the full-time degree-credit enrollment in the institutions whose charges were published. Required fees are those for matriculation, laboratory, library, health, etc., but do not include books.

Additional charges to graduate students were not estimated because charges to graduate students were not published by institution. Additional charges by publicly controlled institutions to nonresident students were not estimated because enrollment of nonresident students was not available by institution for each of the base years.

Estimated average basic student charges (entire academic year)

The estimated average basic student charges (tuition and required fees, board, and room) by publicly controlled institutions of higher education, in 1966-67 dollars, increased from \$874 in 1956-57 to \$1,034 in 1966-67. The charges are expected to reach \$1,211 by 1976-77. (Table 44.) The estimated average basic student charges by nonpublicly controlled institutions of higher education were \$1,486 in 1956-57, \$2,125 in 1966-67, and are expected to reach \$2,748 in 1976-77. The trend indicates that charges by nonpublic institutions will increase at a much higher rate than charges by publicly controlled institutions. The rise in estimated average basic student charges is influenced primarily by tuition and required fees, although room charges have also been a factor. The charges for board, in comparison with other charges, have been held on a relatively even keel, and even reduced slightly when allowance is made for changes in the purchasing power of the dollar over the past decade. Board charges are held unchanged at the 1966-67 level through the projected decade. We are, in effect, assuming that the many large institutions which had held their board charges unchanged, in current unadjusted dollars, will not be able to continue doing so during the next decade. Board and room are ordinarily considered to be services for which a fee is charged that is directly related to, although not necessarily equal to, the cost of the service.

Tuition and required fees are the primary source of funds for educational and general purposes in nonpublicly controlled institutions. The remainder is made up largely of income from the Federal Government which is designated for research, from endowment earnings, and from private gifts and grants.

The publicly controlled institutions' source of educational and general funds are primarily from State governments for the 4-year institutions and from State and local governments for the 2-year institutions. Tuition and required fees in publicly controlled institutions are only approximately one-fourth of the income from State and local governments. Income from the Federal Government, designated for research, in the 4-year institutions, exceeds the amount received from the financial forms.



Table 43.—Capital outlay of institutions of higher education: United States, 1956-57 to 1976-77 1

	То	tal	Pub	olic	Nonpublic		
Year (1)	Billions of current dollars (2)	Billions of 1966-67 dollars (3)	Billions of current dollars (4)	Billions of 1966-67 dollars (5)	Billions of current dollars (6)	Billions of 1966-67 dollars (7)	
1956-57: 2	\$1.050	\$1.432	\$0.650	\$0.886	\$0.400	\$ 0.546	
1957-58	1.161	1.529	$0.73\overline{2}$	$\bar{0}.964$	0.429	0.565	
1958-59: ²		1.602	0.720	0.921	0.533	0.681	
		1.680	0.806	1.001	0.547	0.679	
1959-60		1.963	0.931	1.129	U.688	0.834	
1960–61: ²		2.030	1.010	1.196	0.704	0.834	
1957–58 to 1961–62	7.100	8.804	4.199	5.211	2.901	2.593	
1962-63: 2	2.533	2.920	1.595	1.839	0.938	1.081	
1963-64		2.760	1.518	1.699	0.948	1.061	
1964–65: ³		3.515	2.061	2.248	1.161	1.26	
1965-66: *		3.617	2.201	2.320	1.230	1.29'	
1966-67: 8	-	3.398	2.224	2.224	1.174	1.174	
1962–63 to	_ 0.070						
1966-67	_ 15.050	16.210	9.599	10.330	5.451	5.880	
	P	ROJECTEI) 4				
1967-68	3.385	3.294	2.207	2.148	1.178	1.14	
1968-69		3.078		2.038		1.04	
1969-70	_			1.857			
1970-71						0.79	
1970-72						0.70	
 -							
1967–68 to 1970–71		_ 14.129		9.560		4.56	
1972-73		_ 2.363)		
1973-74		$_{-}$ 2.557		_	3		
1974-75		2.681			2		
1975-76				1.84	l		
1976-77		2.456		_ 1.793	3	0.6	
1970-77			,	_ 9.064	1	_ 3.5	

¹ Sources: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) Statistics of Higher Education, Biennial Survey of Education in the United States, chapter 4, 1955-56 and 1957-58; (2) Survey of Financial Statistics of Higher Education, 1959-60, 1961-62, and 1963-64 and (3) unpublished data in the Office of Education.

Conversion to 1966-67 dollars was based on the American Appraisal Company Construction Cost Index. For method of converting, see appendix table K.

4 The projection of capital outlay was based on the following assumptions: (1) That capital outlay per additional full-time equivalent of total opening fall enrollment will follow the 1956-57 to 1966-67 trend insofar as capital outlay resulting in increased value of plant is concerned; (2) that capital outlay for replacement and rehabilitation will remain constant at the level of 1% of value of plant each year through 1976-77; (3) that since capital outlay relates to increased numbers of students over a number of years rather than annually, a moving average would more reasonably reflect annual capital outlay:

For methodological details, see appendix table D.

NOTE.—Data are for 50 States and the District of Columbia for all years.

^{*} Interpolated.

^{*} Estimated.

Table 44.—Estimated average charges to full-time resident degree-credit undergraduate students, by type and control of institution of higher education: United States, 1956-57 to 1976-7?

[Charges are for the academic year and in constant 1966-67 doilars]

Year and control	tuitio	Total on, board, room	and	(includ	Tuition les require	ed fees)	(7	Board -day ba	sis)	D	ormitory rooms	,
	A'l (2)	4-year (3)	2-year (4)	All (5)	4-year (6)	2-year (7)	All (8)	4-year (9)	2 year (10)	All (11)	4-year (12)	2-year (17)
1956-57: 1												
Public \$	874	\$883	\$ 637	\$206	\$211	\$88	\$482	\$484	\$417	\$186	\$18 8	\$132
Nonpublic 1,	486	1,504	929	700	714	322	526	530	433	260	260	174
1957-58: ¹												
Public	877	886	631	210	215	89	471	473	405	196	198	137
Nonpublic 1,	532	1,543	993	748	761	374	5 16	519	432	268	268	187
1958-59: ¹												
Public	895	907	639	216	224	92	469	471	402	210	212	145
Nonpublic 1,	€00	1,622	1,069	809	821	429	5 16	519	438	275	282	202
1959-60: ¹												
Public	913	926	644	223	232	94	467	469	398	223	225	152
Nonpublic . 1,	673	1,690	1,147	866	878	484	515	519	445	292	293	218
1960-61:1												
Public	932	947	650	230	240	96	465	468	395	237	239	159
Nonpublic 1,	741	1,756	1,221	922	934	5 36	515	517	451	304	305	234
1961-62: 2												
Public	952	970	656	239	254	96	463	464	390	250	252	170
Nonpublic 1,	824	1,844	1,311	992	1,008	588	517	520	467	315	316	256
1962-63: ²												
Public	974	994	665	240	257	105	470	471	390	264	266	170
Nonpublic 1,	865	1,888	1,375	1,621	1,039	649	514	516	462	330	333	264
1963-64: 2												
Public		1,013	671	250	271	103	464	465	385	274	277	183
Nonpublic 1,	935	1,962	1,400	1,079	1,099	685	5 19	523	455	337	340	260
1964-65: ²												
Public1,	000	1,030	671	256	281	104	459	461	380	285	288	187
Nonpublic 2,	007	2,039	1,531	1,145	1,172	7 39	514	516	488	348	351	304
1965-66: 1												
Public 1,	019	1,052	680	262	290	108	460	462	378	297	300	194
Nonpublic 2,	062	2,099	1,576	1,188	1,218	788	515	518	482	359	363	306
1966-67: 1												
Public 1,	034	1,071	684	268	299	110	458	460	374	308	312	200
Nonpublic 2,	125	2,164	1,644	1,210	1,273	836	515	517	488	370	374	320

TABLE 44—Continued

Year and control	tuitie	Total tuition, board, and room			Tuition (includes required fees)			Board (7-day basis)			Dormitory rooms		
(1)	All (2)	4-year (3)	2-year (4)	All (5)	4-year (6)	2-year (7)	All (8)	4-yerr (9)	2-year (10)	Ail (11)	4-year (12)	2-year (13)	
				PR	OJECTI	ED 3							
1967-68:						·							
Public	1,052	1,092	692	274	308	112	458	460	374	320	324	206	
Nonpublic			1,707	1,292	1,328	835	515	517	488	380	385	334	
1968-69:	,	·											
Public	1,070	1,114	701	280	313	114	458	460	374	332	336	213	
Nonpublic	2,248	2,297	1,770	1,343	1,383	934	515	517	488	390	397	348	
1969-70:	•	•	·	-									
Public	1,087	1,136	709	286	328	116	458	460	374	3	348	2 19	
Nonpublic	•	2,363	1,833	1,395	1,438	983	515	517	488	401	408	362	
1970-71:	•	·	·	•	·								
Public	1,104	1,157	718	292	337	118	458	460	374	354	360	226	
Nonpublic	2,374	2,430	1,896	1,447	1,494	1,032	515	517	488	412	419	376	
1971-72:	·	•		·	•	•							
Public	1,122	1.778	727	298	346	121	458	460	374	366	372	232	
Nonpublic	2,437	2,496	1,959	1,499	1,549	1,081	515	517	488	423	430	3 90	
1972-73:	·												
Public	1,140	1,200	735	304	356	123	458	460	374	378	384	238	
Nonpublic	2,498	2,562	2,022	1,550	1,604	1,130	515	517	488	433	441	404	
1973-74:	·	•		•	·								
Public	1,157	1,222	744	310	366	125	458	460	374	389	396	245	
Nonpublic	2,561	2,629	2,085	1,602	1,659	1,179	515	517	488	444	453	418	
1974-75:	•		•										
Public	1,174	1,243	752	316	375	127	458	460	374	400	408	25 1	
Nonpublic	2,623	2,695	2,148	1,654	1,714	1,228	515	517	488	454	464	432	
1975-76:	·	•	·	·									
Public	1,193	1,264	762	323	384	130	458	460	374	412	420	258	
Nonpublic		2,762	2,210	1,706	1,770	1,276	515	517	488	465	475	446	
1976-77:	•	-	-	•	-	•							
Public	1,211	1,285	770	329	394	132	458	460	374	424	431	264	
Nonpublic			2,273	1,757	1,825	1,325	515	517	488	476	486	460	

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Higher Education Basic Student Charges," 1961-62 through 1964-65; and (2) "Opening (Fall) Enrollment in Higher Education," 1961 through 1964

1 Estimated

through 1976-77 as they did during the base years of 1961-62 throug!. 1964-65, in constant dollars. The decreases in charges for board during the base period are not projected and are frozen at the 1966-67 level. The base year data for board charges, in current unadjusted deliars, did show an increase but not enough to offset the application of the Consumer Price Index.

For methodological details, see appendix table D.

NOTE.—Data are fcr 50 States and the District of Columbia for all years.



² Data for 1961-62 through 1961-65 represent constant 1966-67 dollars as converted from the unadjusted current dollars shown in table 45. See constant dollar index, table K.

The projection of basic student charges is based on the assumption that these charges will continue to increase

TABLE 45.—Estimated average charges to full-time resident degree-credit undergraduate students, by type and control of institution of higher education: United Stees, 1956-57 to 1968-69

[Charges are for the academic year and in current unadjusted dollars]

Year and control	tuitio	Total n, board, room	and	(include	Tuition es require	d fees)	Board (7-day basis)			Dormitory rooms		
(1)	All (2)	4-year (3)	2-year (4)	All (5)	4-year (6)	2-year (7)	A11 (8)	4-year (9)	2-year (10)	All (11)	4-year (12)	2-year (13)
1956-57: 1	-				_							
	734	\$742	\$536	\$173	\$177	\$74	\$405	\$407	\$351	\$156	\$158	\$111
Nonpublic 1		1,265	781	589	600	271	442	446	364	219	219	146
1957-58: 1	,	,										
Public	761	770	548	182	187	77	409	411	352	170	172	119
Nonpublic 1	331	1,345	862	650	661	325	448	451	375	233	233	162
1958-59: 1		•										
Public	788	799	563	190	197	81	413	415	354	185	187	128
Nonpublic 1	408	1,428	942	712	723	378	454	457	386	242	248	178
1959-60: 1		·										
Public	815	827	575	199	207	84	417	419	355	199	201	136
Nonpublic 1	,494	1,509	1,024	773	784	432	460	463	3 97	261	262	195
1969-61: 1												
Public	843	856	588	208	217	87	421	423	357	214	216	144
Nonpublic 1	,575	1,589	1,105	834	845	485	466	468	408	275	276	212
1961-62:												•
Public	869	886	599	218	232	88	423	424	356	228	230	155
Nonpublic 1	,666	1,685	1,198	906	921	537	472	475	427	288	289	234
1962-63:												
Public	901	920	615	222	238	97	435	436	361	244	246	154
Nonpublic 1	,724	1,746	1,271	944	961	600	475	477	427	305	308	247
1963-64:								_				
Public	926	950	630	234	254	97	435	436	361	257	260	
Nonpublic 1	,815	1,840	1,313	1,012	1,031	642	487	490	427	316	319	244
1964-65:												4-0
Public	950	979	638	243	267	99	436	438	361	271	274	
Nonpublic 1	,907	1,936	1,455	1,088	1,113	702	438	490	464	331	333	289
1965-66: ¹									0.0=	200	201	100
Public		•	660	254	281	105	446	448		288		
Nonpublic 2	,001	2,037	1,530	1,153	1,182	765	500	503	468	348	352	297
1966-67: ¹					200		450	400	054	000	010	900
Public1			684	268	299	110	458	460		308		
Nonpublic 2	,125	2,164	1,644	1,240	1,273	836	515	517	488	370	374	320
				PR	OJECT:	ED :						
1967-68:												
Public	1,068	1.110	703	278	313	114	465	468	380	325	329	
Nonpublic 2					1,350	899	523	525	496	386	391	339
1968-69:	,	, –	•	-	•							
Public	1.109	1.155	727	290	330	118	475	477	388	344	348	22
T (1)110	-,	-,					534	536	506	404	412	361

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Higher Education Basic Student Charges," 1961-62 through 1964-65; and (2) "Opening (Fall) Enrollment in Higher Education," 1961 through 1964.

See constant dollar index, table K.

Data for 1956-57 through 1960-61 and for 1965-66 through 1966-67 estimated by applying the 1961-62 to 1966-67 trend in the Consumer Price Index to the data in table 44.

Projected by applying the 1961-62 to 1966-67 trend in the Consumer Price Index to the projected charges to students (table 44).

For methodological details, see appendix table D.

NOTE.—Data are for 50 States and the District of Columbia for all years.

APPENDIX

General Methodology and Statistical Tables

The 1967 projections of educational data by the U.S. Office of Education include enrollments at all levels, high school graduates, degrees by level and field, teacher and faculty demand, and expenditures in elementary and secondary schools and in institutions of higher education. Of these, projections of the number of children entering the first three grades of public elementary and secondary schools, enrollments in higher education, high school graduates, and degrees by level, were based directly on population. The others, with the exception of enrollment in grades 3 through 12 of public elementary and secondary schools and of degrees by field, were based on enrollments. Enrollments in grades 3 through 12 of public elementary and secondary schools were based on grade retention rates. Degrees by field were based on the distribution of total degrees by field at each level over a 10-year period.

Population aged 18-21 years was used for projecting college enrollments. It is recognized that not all college enrollments fall in this age group; nevertheless, in the absence of data on age of college students, some fairly sensitive yet stable exposure measure had to be used. Since about two-thirds of all degree-credit enrollment is full time, it can be assumed that a like proportion of the students fit the population age group used. The population averaging 18 years of age was chosen for projecting both high school graduates and first-time college enrollment. This age group gave a smoother fit when correlated with graduates and first-time college enrollment. This age groups. For projecting kindergarten, first-grade, and these data than could be obtained with other age groups. For projecting kindergarten, first-grade, and second-grade enrollments, population aged 5 years, 6 years, and 7 years, respectively, was used.

The choice of timelag between first-year enrollments and bachelor's degrees, between bachelor's degrees and master's degrees, and between master's degrees and doctorates was also made on an empirical basis. The different series of data were plotted against time so that different timelags between the series could be compared. While the evidence for the timelags chosen was not uniformly conclusive, there was no evidence pointing to a different choice.

The timelags chosen were: Bachelor's degrees 4 years after first-time enrollment, master's degrees 2 years after bachelor's degrees, and doctorates 3 years after master's degrees. To avoid escalation in rates, the actual projection of degrees was based on population of the age, assuming the chosen timelag, which fitted the entrance of the student into college.

For making the projections, regression methods were used wherever a trend could be established. Where no consistent series was available or the data were too irregular to establish a trend, a constant based on the latest observation or an average of the last two or three observations was used. For some projections, such as graduate enrollments, enrollments in institutions of higher education by full-time and part-time attendance, and nondegree-credit enrollments, relationships had to be obtained from a different series of data and transferred to the opening fall higher education enrollment series. This series is current and reasonably consistent in the past, although lacking some detailed characteristics which are required by educators for decision-making.

Fo. the trend, observations in the 10 most recent years were used and these were extrapolated for 10 years into the future. The 10-year timespan was considered better than a longer timespan because of the rapid change in economic and social conditions and the improvement in the available statistics in recent years.

Straight lines fitted by the least squares technique to the ratio (for example, of enrollment to population) as the dependent variable and time in years as the independent variable were used for projecting whenever possible. The rationale for using the straight line is that the long-range, true curve of relationship would be likely to yield a straight line over any portion covering only a 10-year span. An advantage in using straight lines is their additive property when the ratio bases are the same. This simplifies projection of components (all complex data are usually projected by components and summed).

The fitted straight line often lies considerably above or below the last observed point, resulting in an unusual rise or drop from the last actual observation. To avoid this and give face validity to the projections, the line was used only to establish the last point and a new line was drawn through the last observed ratio and the end point on the curve. (In this case, the fitted equation is used only to establish observed ratio at the end of the 10-year span.) When all c. the component curves are adjusted in this manner, they are additive just as were the original curves. For this reason, when any curve ir a group of components exhibited a serious difference with the last observation, all of the component curves were adjusted,



even if differences were slight. An independent curve was adjusted only when the discrepancy was serious.

An exception to the use of the straight line for projecting trends was made for projecting grade retention rates in the public schools. Because retention rates rose rapidly in the last 10 years, a straight line equation would produce projected rates well above permissible limits of retention. To allow for leveling off and to keep within such limits, an asymptotic equation was used with limits at 100 percent except at certain grade levels where transfer of students from nonpublic schools occurs in large numbers.

The tables that follow outline for such major area (enrollments, degrees, teachers, and expenditures) the equations and constants that were used, the standard error when appropriate, and adjustments, if they were used. Adjustments have been expressed in terms of the projection equation.

TABLE A.—Methodology (ch. I)

			Projection	metho	od 				
Item	Text table		Trend						
	num- bor	(per- cent)	Least squares equation $(y = percent; article y = year; 1956 = 1)$	rd	Adjusted equation 1				
	ay 2								
schools.			44 40 1 0 084 0	41	al - 45 49 LO 031				
Kindergarten 2			y' = 44.49 + 0.98t - 0.4	41 07	y' = 45.42 + 0.93t				
Grade 1 3			y' = 97.64 - 0.22t - 0.8	81	y' = 99.64 - 0.32t				
			$y' = 90.274 - 0.032t_{-1} 0.0$	65	$y' = 91.75 - 0.10t_{}$				
Grade 2 to grade 3 5.									
			$=0.284-0.018t_{}0.0$	084					
Grade 3 to grade 4 5									
			$=0.248-0.025t_{}0.0$	076					
Grade 4 to grade 5 7.			$\log (100-y')$						
			$=0.280-0.069t_{}0.1$	29					
Grade 5 to grade 6 8-									
			$=0.438-0.083t_{}0.$						
Grade 6 to grade 7 %-		103.0							
Grade 7 to grade 8 10.			$\log (100-y')$						
			$=0.699-0.064t_{}0.$						
Grade 8 to grade 9 11.		. 104.0							
Grade 9 to grade 10 1	12		$-\log (100-y')$						
· ·			$=0.981-0.043t_{}0.$. 55					
Grade 10 to grade 11	13		$\log (100-y')$						
			$=1.140-0.025t_{}0.$.035					
Grade 11 to grade 12	14		$\log (100-y')$						
			$=1.088-0.021t_{}0.$						
Organizational level 1	15 3		$y' = 48.05 + 1.16t_{}1.$	37	y' = 45.21 + 1.29t				
Fall enrollment in regul nonpublic day scho	lar 2 3								
Grades K-8						$(^{16})$			

Text table num- ber	Con- stant (per-		Tre	nd						
num-				Trend						
	cent)	Least squares equation (y = percent; t = year; 1956 = 1)	Stand- ard error	Adjusted equation '						
5–7 .										
		$y' = 14.78 + 0.39t_{}$	0.51	y' = 14.81 + 0.39t						
				y' = 8.53 + 0.67t						
				y' = 13.75 - 0.15t						
				v						
				•						
		y'=1.152+0.026t	0.054	y' = 1.249 + 0.021t						
8–10										
		$y'=18.95+0.75t_{}$	1.07	y' = 19.79 + 0.71t						
	-	y' = 9.74 + 0.88t	0.60	y' = 10.98 + 0.82t						
		$y'=18.97-0.11t_{}$	0.29	$y' = 18.80 \cdot 0.10t$						
		y' = 9.14 + 0.18t	0.16	y' = 8.91 + 0.19t						
		$y' = 3.91 + 0.32t_{}$	0.32	y' = 4.61 + 0.29t						
		y'=1.70+0.27t	_ 0.21	y' = 2.57 + 0.23t						
		$y' = 0.486 + 0.033t_{}$	_ 0.072	y' = 0.571 + 0.029t						
nt,										
ng		y' = 10.23 + 0.38t	0.82							
		y' = 8.03 + 0.14t	0.42							
ns		$y' = 12.39 + 0.24t_{-1}$ $y' = 8.855 + 0.062t_{-1}$	0.50 0.40))						
	8-10	8-10	y' = 14.78 + 0.39t $y' = 9.10 + 0.64t$ $y' = 14.14 - 0.17t$ $y' = 9.200 + 0.041t$ $y' = 6.66 + 0.42t$ $y' = 3.38 + 0.38t$ $y' = 0.918 + 0.049t$ $y' = 1.152 + 0.026t$ $y' = 1.152 + 0.026t$ $y' = 1.895 + 0.75t$ $y' = 9.74 + 0.88t$ $y' = 9.74 + 0.88t$ $y' = 9.14 + 0.18t$ $y' = 3.91 + 0.32t$ $y' = 1.70 + 0.27t$ $y' = 0.486 + 0.033t$ $y' = 0.530 + 0.019t$ $y' = 1.39 + 0.24t$ $y' = 8.03 + 0.14t$ $y' = 8.855 + 0.062t$	y' = 14.78 + 0.39t - 0.51 $y' = 9.10 + 0.64t - 0.40$ $y' = 14.14 - 0.17t - 0.32$ $y' = 9.200 + 0.041t - 0.28$ $y' = 6.66 + 0.42t - 0.56$ $y' = 3.38 + 0.38t - 0.32$ $y' = 0.918 + 0.049t - 0.072$ $y' = 1.152 + 0.026t - 0.054$ $8-10$ $y' = 9.74 + 0.88t - 0.60$ $y' = 18.97 - 0.11t - 0.29$ $y' = 9.14 + 0.18t - 0.16$ $y' = 3.91 + 0.32t - 0.32$ $y' = 1.70 + 0.27t - 0.21$ $y' = 0.486 + 0.033t - 0.072$ $y' = 0.530 + 0.019t - 0.038$ $y' = 10.23 + 0.38t - 0.042$ $y' = 8.03 + 0.14t - 0.42$ $y' = 8.03 + 0.14t - 0.42$ $y' = 8.855 + 0.062t - 0.40$	$y' = 14.78 + 0.39t \dots 0.51 y' = 14.81 + 0.39t $ $y' = 9.10 + 0.64t \dots 0.40 y' = 8.53 + 0.67t $ $y' = 14.14 - 0.17t \dots 0.32 y' = 13.75 - 0.15t $ $y' = 9.200 + 0.041t \dots 0.28 y' = 8.420 + 0.080t $ $y' = 6.66 + 0.42t \dots 0.56 y' = 6.89 + 0.41t $ $y' = 3.38 + 0.38t \dots 0.32 y' = 3.84 + 0.36t $ $y' = 0.918 + 0.049t \dots 0.072 y' = 0.984 + 0.046t $ $y' = 1.152 + 0.026t \dots 0.054 y' = 1.249 + 0.021t $ $8-10 y' = 18.95 + 0.75t \dots 1.07 y' = 19.79 + 0.71t $ $y' = 9.74 + 0.88t \dots 0.60 y' = 10.98 + 0.82t $ $y' = 18.97 - 0.11t \dots 0.29 y' = 18.80 \cdot 0.10t $ $y' = 9.14 + 0.18t \dots 0.16 y' = 8.91 + 0.19t $ $y' = 3.91 + 0.32t \dots 0.32 y' = 4.61 + 0.29t $ $y' = 1.70 + 0.27t \dots 0.21 y' = 2.57 + 0.23t $ $y' = 0.486 + 0.033t \dots 0.072 y' = 0.571 + 0.029t $ $y' = 0.530 + 0.019t \dots 0.038 y' = 0.573 + 0.017t $ $y' = 12.39 + 0.24t \dots 0.42 $ $y' = 12.39 + 0.24t \dots 0.42 $ $y' = 12.39 + 0.24t \dots 0.42 $ $y' = 12.39 + 0.24t \dots 0.50 $ $y' = 8.855 + 0.062t \dots 0.40 $					

Table A.—Methodology (ch. I)—Continued

			Projection method						
	Text Con-								
Item	num- ber	(per- cent)	Least squares equation (; = percent; t = year; 1956 = 1)	Stand- ard error	Adjusted equation	Other			
Full-time graduate opening fall degree-credit en- rollment, 4-year	12		·						
institutions. 21		59 0		_					
Men, public institutions. Women, public		36.0							
institutions.									
Men, private institutions.		-							
Women, private institutions.		32.3							
Full-time undergraduate	14								
opening fall degree- credit enrollment, 4- year institutions. ²²									
Men, public institutions		78.8							
Women, public		75.2							
institutions.									
Men, private		. 76.€							
institutions.									
Women, private		_ 76. 6							
institutions.	10								
Full-time undergraduate opening fall degree-credit enrollment, 2-year institutions. 23	10								
Men, public institutions	3	_ 59.	1						
Women, public institutions.		_ 49.	4						
Men, private		_ 81.	2						
institutions. Women, private		. 84.	9						
institutions. Total opening fall non-	18	·	#						
degree-credit enroll- ment.	10	, 							
Public institutions 24		9.	5						
Full-time 25		40.	0						
Private institutions. 26_		2.	6						
Full-time 25		40.	0						
Full-time equivalent of part-time opening fa	ll	6		-					
degree-credit enroll- ment. 27									
Public institutions		33	.0						
Private institutions		33	.0						
part-time opening fa	all	6							
nondegree-credit en- rollment. ²⁸									
Public institutions		28	.0						
Private institutions_		28	.0						

- 1 Adjusted by relocating line through last observed point and 1976 point of fitted line.
- y = percent kindergarten enrollment is of population aged 5 years.
- y = percent 1st grade enrollment is of population aged 6 years.
- 4y = percent 2d grade enrollment is of population aged 7 years.
- f y = percent grade 3 is of grade 2 in preceding year with restriction that percent cannot exceed 100.
- y = percent grade 4 is of grade 3 in preceding year with restriction that percent cannot exceed 100.
- 7y =percent grade 5 is of grade 4 in preceding year with restriction that percent cannot exceed 100.
- * y = percent grade 6 is of grade 5 in preceding year with restriction that percent cannot exceed 100.
- Constant percent = percent grade 7 is of grade 6 in preceding year. (Transfers from nonpublic schools are assumed to account for excess over 100).
- 10 y = percent grade 8 is of grade 7 in preceding year with restriction that percent cannot exceed 100.
- 11 Constant percent = percent grade 9 is of grade 8 in preceding year. (Transfers from nonpublic schools are assumed to account for excess over 100).
- 13 y = percent grade 10 is of grade 9 in preceding year with restriction that percent cannot exceed 100.
- 13 y = percent grade 11 is of grade 10 in preceding year with restriction that percent cannot exceed 100.
- 14 y = percent grade 12 is of grade 11 in preceding year with restriction that percent cannot exceed 100.
- 15 y = percent 7th and 8th grades organized as secondary are of total 7th and 8th grades.
- 16 Approximations based on the assumption that enrollment in grades K-8 in nonpublic schools will decrease to 1972, and then remain constant through 1976.
- 17 Approximations based on the assumption that enrollment in grades 9-12 in nonpublic schools will increase to 1972, and then remain constant through 1976.
- 18 y = percent that 1st-time opening fall degree-credit enrollment is of population aged 18 at nearest birthday (projected separately by sex and by type and control of institution).
- 19 y = percent opening fall degree-credit enrollment is of population aged 18-21 in completed years (projected separately by sex and by type and control of institution).
- v_y = percent that resident graduate 1st-term degree-credit enrollment is of total resident plus extension, graduate plus undergraduate in 4-year institutions (projected separately by sex and control of institution). The extrapolated percents were applied to projected resident plus extension, graduate plus undergraduate opening fall degree-credit enrollment in 4-year institutions.

- 21 Constant percent = percent that full-time graduate 1st-term degree-credit enrollment was of total graduate 1st-term degree-credit enrollment in 1961-62, calculated separately for each category by type and control of institution and by sex and level of student. These percentages were adjusted to agree with percentages for total opening fall degree-credit enrollment in 1961 through 1965 by control of institution and by sex of student. The adjusted 1965 percentages, held constant to 1976, were applied to projected graduate opening fall degree-credit enrollment 1967 to 1976 in each corresponding category by type and control of institution and by sex of student.
- 22 Method was same as for full-time graduate opening fall degree-credit enrollment, replacing graduate enrollment by undergraduate enrollment.
- ²² Constant percent = percent that was full-time by control of institution and sex of student as reported for 2-year institutions in the 1965 opening fall enrollment survey. These percentages, held constant to 1976, were applied to projected opening fall degree-credit enrollment in 2-year institutions in corresponding categories by control of institution and by sex of student.
- ²⁴ Constant percent = percent that nondegree-credit opening fall enrollment in publicly controlled institutions was of degree-credit opening fall enrollment, in publicly controlled institutions in 1965. (This percentage, held constant to 1976, was applied to projected degree-credit enrollment in publicly controlled institutions).
- 25 Constant percent = percent that full-time nondegreecredit enrollment was of total nondegree-credit enrollment in the 1964 full-time-equivalent enrollment and credit-hours survey. (This percentage, held constant to 1976, was applied to projected nondegree-credit enrollment in publicly and privately controlled institutions).
- 26 Constant percent = percent that nondegree-credit opening fall enrollment in privately controlled institutions was of degree-credit opening fall enrollment in privately controlled institutions in 1965. (This percentage, held constant to 1976, was applied to projected degree-credit enrollment in privately controlled institutions).
- 27 Constant percent = percent that full-time equivalent of part-time degree-credit enrollment was of part-time degree-credit enrollment in the 1964 full-time-equivalent enrollment and credit-hours survey (percent same in publicly and privately controlled institutions).
- **Constant percent == percent full-time equivalent of part-time nondegree-credit enrollment was of part-time nondegree-credit enrollment in the 1964 full-time-equivalent enrollment and credit-hours survey (percent same in publicly and privately controlled institutions).

			Projection Projection	on method					
Item	Text table	Con- stant							
	num- ber	(per- cent)	Least squares equation $(t = year; 1955-56 = 1)$	Standard error	Adjusted equation				
High school graduates.									
Public ²									
			$y' = 50.83 + 1.13t_{}$		y' = 56.44 + 0.86t				
Women					y' = 60.14 + 0.76t				
Nonpublic 3									
Bachelor's and 1st-pro- fessional degrees con- feired on men. 5					y' = 18.81 + 0.33t				
Selected fields 6					1 0 00 1 0 00 1				
Mathematics and statistics.			•						
Engineering			-		y' = 13.70 - 0.25t				
Physical sciences					y' = 3.90 + 6.10t				
Biological sciences			-		y' = 4.782 + 0.091t				
Agriculture and forestry_					y' = 3.88 - 0.16t				
Health professions					y' = 6.76 - 0.22t				
Science, general program.				.058	y' = 0.388 + 0.024t				
Fine arts			=		y' = 4.428 - 0.036t				
Philosophy and religion					y' = 2.362 - 0.018t				
English and journalism			-		y' = 3.746 + 0.073t				
Foreign languages			=	.12	y' = 0.643 + 0.073t				
Psychology			=		y' = 1.56 + 0.13t				
Social sciences			•		y' = 14.20 + 0.40t				
Education			-		y' = 7.372 - 0.064t				
Library science			=		/ 0.000.10.010.				
Social work			·		y' = 0.236 + 0.018t				
Other			•		y' = 30.00 - 0.40t				
Bachelor's and 1st-pro-	18		$y' = 9.84 + 0.51t_{}$.27	y' = 10.91 + 0.46t				
fessional degrees con-									
ferred on women. 5	00								
Selected fields									
Mathematics and statistic			•		y' = 0.94 + 0.22t				
Engineering			_		w/ =1 002 0 0104				
Physical sciences			•		y' = 1.263 - 0.018t				
Biological sciences			_		y' = 2.24 + 0.12t				
Agriculture and forestry					w/ _ 7 20 0 004				
Health professions					y' = 7.30 - 0.20t				
Science, general program			-		y' = 0.2710 + 0.005 y' = 8.636 - 0.082t				
Fine arts					-				
Philosophy and religion					y' = 1.246 - 0.027t y' = 8.04 + 0.37t				
English and journalism.			-		y' = 8.04 + 0.37t y' = 1.96 + 0.28t				
Foreign languages					· ·				
Psychology					y' = 2.390 + 0.045t				
Social sciences			-		y' = 10.16 + 0.28t y' = 36.70 - 0.30t				
			y' = 38.53 - 0.39t		y' = 30.70 - 0.30t y' = 1.0818 - 0.009				
			y' = 1.0472 - 0.0061t						
Social Work			y' = 0.986 + 0.019t	061	y' = 1.036 + 0.018t				

See footnotes at end of table.



Table B.—Methodology (ch. II)—Continued

T4	Text table	Con- stant		Trend	
Item:	num- ber	(per- cent)	Least squares equation $(t = year; 1955-56 = 1)$	Standard error	Adjusted equation 1
Master's (except 1st-pro- fessional) degrees con-	18		y' = 3.47 + 0.24t	.045	y' = 3.43 + 0.24t
ferred on men. ⁷					
Selected fields 8	21				
Mathematics and			y' = 1.59 + 0.34t	.14	y' = 1.40 + 0.35t
statistics.					
Engineering			y' = 12.30 + 0.43t	.36	y' = 11.62 + 0.46t
Physical sciences.	- -		y' = 6.100 - 0.027t	. 23	y' = 5.536 + 0.018t
Biological sciences			y' = 3.3764 - 0.0036t	. 13	y' = 3.943 - 0.027t
Agriculture and forestry.			y' = 3.73 - 0.17t	. 13	y' = 3.68 - 0.16t
Health professions	- -		y' = 2.199 - 0.048t	.15	y' = 2.472 - 0.064t
Science, general program			$y' = 0.15 + 0.11t_{}$.13	y' = 0.362 + 0.082t
Fine arts			y' = 6.31 - 0.14t	. 13	y' = 6.55 - 0.15t
Philosophy and religion			y' = 1.480 - 0.047t	.14	y' = 1.0819 - 0.0091t
English and journalism_			y' = 2.937 + 0.050t	.11	y' = 2.805 + 0.055t
Foreign languages			y' = 1.114 + 0.061t	.14	y' = 1.395 + 0.045t
Peychology			y' = 1.771 + 0.051t	. 13	y' = 1.895 + 0.045t
Social sciences			y' = 8.76 + 0.23t	.25	y' = 9.11 + 0.21t
Education			y' = 36.22 - 0.95t	. 61	y' = 35.58 - 0.92t
Library science	· -		y' = 0.068 + 0.021t	.00	
Social and			y'=0.106+0.019t		
Social Work			$y' = 11.589 + 0.08^{\circ}i$.40	y' = 12.124 + 0.064t
Otner	10		y' = 17.000 + 0.000 = 1222		y' = 1.9905 + 0.0845
Master's (except 1st-pro-	10		y =1.700+0.0301	.000	g 1,0000 0.0010
fessional) degrees con-					
ferred on women. 7	0.1				
Selected fields 8	21		y' = 0.85 + 0.18t	19	y' = 0.68 + 0.18t
statistics.					y =0.08-7-0.13t
Engineering	- ·		y' = 0.1	00	~/ _ 0 010 ± 0 0554
Physical sciences	·		y' = 1.093 + 0.046t	.12	y' = 0.910 + 0.055t
Biological sciences	- -	-	y' = 1.84 + 0.13t	. 17	y' = 1.27 + 0.17t
Agriculture and forestry		<i>-</i>	y' = 0.1	00	./ 0 449 1 0 0794
Health professions			y' = 2.693 + 0.058t	43	y' = 2.443 + 0.073t
Science, general program	1	. . •	y' = 0.125 + 0.032t	11	
Fine arts	-	-	y' = 7.222 + 0.071t	24	y' = 7.776 + 0.036t
Philosophy and religion.	. -	 -	y' = 1.011 - 0.044t	10	y' = 0.6819 - 0.0091
English and journalism			$y' = 4.74 + 0.40t_{}$	19	y' = 4.13 + 0.43t
Foreign languages	- 	-	y'=1.64+0.29t	27	y' = 2.06 + 0.26t
Psychology			y' = 1.49 + 0.10t	19	y' = 1.962 + 0.082t
Social sciences			$y' = 4.45 + 0.20t_{}$	24	y' = 4.41 + 0.21t
Education		-	y' = 65.18 - 1.56t	57	y' = 65.34 - 1.56t
Library science			y' = 0.48 + 0.15t	17	
Social work			y' = 0.271 + 0.041t	.12	
Nan	 -		$y' = 6.778 - 0.075t_{}$		y' = 6.395 - 0.055t

See footnotes at end of table.

			Projection	on method	
	Text table	Con-		Trend	
Item	num- ber	(per- cent)	Least squares equation (t = year; 1955-56 = 1)	Standard error	Adjusted equation
Doctor's degrees conferred on men. 9	18		y' = 0.602 + 0.058t	.066	y' = 0.800 + 0.049t
Selected fields 10	22				
Mathematics and					
statistics.					
Engineering					y' = 8.04 + 0.72 t
Physical sciences					y' = 20.04 - 0.18t
Biological sciences					y' = 12.66 - 0.12t
Agriculture and forestry_					y' = 4.010 - 0.045t
Health professions			$y' = 1.785 - 0.075t_{}$.17	y' = 1.754 - 0.073t
Science, general program_					y' = 0.1
Fine arts			$y' = 3.3653 + 0.0054t_{}$.22	y' = 2.772 + 0.036t
Philosophy and religion	- -		$y' = 2.27272 - 0.00061t_{-}$. 24	y' = 1.572 + 0.036t
English and journalism					y' = 4.128 - 0.036t
Foreign languages			$y' = 2.200 - 0.026t_{}$.18	y' = 2.345 - 0.027t
Psychology					y' = 6.072 - 0.064t
Social sciences					y' = 13.66 - 0.12t
Education					y' = 14.90 - 0.20t
Library science					y' = 0.1
Social work					y' = 0.0181 + 0.0091t
Other					y' = 4.464 - 0.018t
Doctor's degrees conferred on					y' = 0.0890 + 0.0069t
women. 9			9 0.000- 0.00000222		g 0.0000 0.00001
Selected fields 10	22				
			y' = 1.04 + 0.18t		y' = 2.34 + 0.12t
Engineering 1!			$y' = 0.194 \pm 0.067t$.18	y' = 0.091 + 0.082t
Physical sciences			y' = 7.066 - 0.014t	.56	y' = 7.2
Biological sciences					y' = 12.8182 + 0.0091t
Agriculture and forestry_					y' = 1.210 - 6.045t
Health professions					y' = 0.736 + 0.018t
Science, general program_					g =0.100 0.010s
Fine arts					y' = 4.636 + 0.018t
Philosophy and religion					y' = 1.190 + 0.045t
English and journalism.					y' = 7.20 + 0.15t
Foreign languages					y' = 7.128 - 0.036t
Psychology					y' = 7.90 + 0.35t
Social sciences					y' = 10.028 - 0.036t
Education			-		y' = 10.028 - 0.036t y' = 28.66 - 0.37t
Library science					•
			-		y'=0.1
Social work Other					y' = 0.510 + 0.055t
			$y = 0.11 - 0.11t_{}$. 59	y' = 5.654 - 0.073t

Adjusted by relocating line through last observed point and 1976-77 point of fitted line.

 $^{^{2}}v$ = percent that public high school graduates are of population averaging 18 years of age for men and women separately.

Total nonpublic high school graduates = the percent that 9-12 nonpublic enrollment is of 9-12 public enrollment in each projected year times public high school graduates in corresponding years (series smoothed).

Constant percent = percent that boys were of nonpublic high school graduates in 1963-64.

y = percent that B.A. degrees are of population averaging 18 years of age, 4 years earlier.

 $^{^{\}bullet} y = \text{percent that B.A. degrees in selected fields are of all B.A. degrees.}$

 $^{^{7}}y =$ percent that M.A. degrees are of population averaging 18 years of age, 6 years earlier.

^{*} y = percent that M.A. degrees in selected fields are of all M.A. degrees.

 $^{^{9}}y$ = percent that doctor's degrees are of population averaging 18 years of age, 9 years earlier.

 $^{^{10}}y = \text{per}$ ent that doctor's degrees in selected fields are of all doctor's degrees.

¹¹ Original equation based on year 1957-58 = 1; adjusted equation based on year 1959-60 = 1.

¹² Constant percent = percent that doctorates conferred on women in science, general program were of all doctorates conferred on women in 1964-65.

			Projection method		
I t em	Text table	Con- stant	Trend		Other
20011	num- ber	-	Least squares equation (t = year; 1956 = 1)	Standard error	
Classroom teachers in regular day schools					
Public elementary					
Public secondary					
Nonpublic elementary					
Nonpublic secondary	04				(•)
Pupil-teacher ratios in regular elementary and	24 .				
secondary day schools. Public elementary 2			at = 20 42 = 0 16t	0.92	
Public elementary *		 01 <i>1</i>	$y = 29.45 - 0.10i_{}$	_ 0.23	
Public secondary ² Nonpublic elementary ²		21.4	4/ - 20. 72 . 0. 404	0.6%	
Nonpublic secondom: 2		17 5	y = 39.73 - 0.491 -	- 0.63	
Nonpublic secondary ² Demand for classroom teachers in public regular	9£	17.0			
	20 .				
day schools.					(4)
For enrollment increase For replacement of substandard teachers 5		220			(-)
For teacher turnover 6 Demand for classroom teachers in nonpublic re-					
	. 0ند				
gular day schools. For enrollment increase					(4)
For teacher turnover 7					
Instructional staff in regular elementary and					
	21.				
secondary day schools. Public ⁸			w/ = 107 91 ±0 214	0 10	
Nonpublic					
Total instructional staff for resident degree-	20		/_11 KQ⊥Λ 12/	0.00	()
credit courses. 10	40 .		$y = 11.00 \pm 0.100 = 1$	- 0.09	
		56 O			
Full-time instructor or above ¹¹ Part-time instructor or above ¹²					
Junior instructional staff 13					
Full-time-equivalent instructional staff for re-	20	10.0			
	<i>∆</i> ∂ .				
sident degree-credit courses. Full-time equivalent of part time 14		33 N			
Full-time equivalent of junior instructional 15		33.0			
staff.		55.0			
Total full-time and part-time professional staff	30				
in institutions of higher education.	5 0 .				
Instructional staff:					
For resident degree-credit courses					(16)
Other instructional staff 17		17.3			. ()
Other professional staff:		11.0			
Administration and services 18		16.4			
Organized research 19					
Total estimated full-time-equivalent profes-	31				
sional staff employed in institutions of	0-				
higher education.					
Instructional staff:					
For resident degree-credit courses					(20)
Other instructional staff 21					
Other professional staff:					
Administration and services 21		71.0			
Organized research 22					
_		-,000			
See footnotes at end of table.					

TABLE C.—Methodology (ch. III)—Continued

		Projecton Method					
It em	Text table	Con-	Trend	Other			
Tveni	num- ber		Least squares equation (t = year; 1956 = 1)	Standard error			
Total demand for estimated full-time-equivalent instructional staff in institutions of higher education.	32						
Demand for additional instructional staff: For increased enrollment		 6 N			_ (²²)		
For replacement ²⁴ Total demand for estimated full-time-equivalent professional staff in institutions of higher education.	33						
Demand for additional professional staff: For increased enrollment For replacement 24					_ (²³)		

- Projected enrollment (table 3) divided b projected pupil-teacher ratio (table 24) for each type of school by control and level.
 - 2y = ratio of number of pupils to number of teachers.
 - * Constant ratio = 1964 pupil-teacher ratio.
 - 4 Increase in total teacher demand over each previous year.
- Constant amount = 1962-66 average decrease in number of teachers with subs'andard certificates.
 - 6 8 percent of total teacher demand in each previous year.
 - 74 percent of total teacher demand in each previous year.
- y = ratio, instructional staff to classroom teachers (staff-teacher ratio times projected classroom teachers = projected instructional staff).
 - Instructional staff assumed = classroom teachers.
- y = student-staff ratio (projected enrollment (table 8) divided by projected student-staff ratio = projected instructional staff).
- 11 Constant percent = percent full-time instructor or above was of total instructional staff in 1963-64.
- ¹² Constant percent = percent part-time instructor or above was of total instructional staff in 1963-64.
- 12 Constant percent = percent junior instructional staff was of total instructional staff in 1963-64.
- 14 Constant percent = percent full-time equivalent of part-time was of total part-time instructor or above in 1963-64
- 15 Constant percent = assumption this percent (not reported by institutions) is same as for full-time equivalent of part-time for instructor or above (reported by institutions).

- ¹⁶ See method detailed for table 28 in footnotes 11 to 13 of this table (methodology table C).
- 17 Constant percent = percent total full-time and part-time other instructional staff was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-34.
- 18 Constant percent = percent total full-time and part-time professional staff for administration and services is of total full-time and part-time instructional staff for degree-credit courses in 1963-64.
- 19 Constant percent = percent total full-time and part-time professional staff for organized research is of total full-time and part-time instructional staff for degree-credit courses in 1963-64
- ²⁰ See method detailed for table 29 in footnotes 14 and 15 of this table (methodology table C).
- 21 Constant percent = percent full-time equivalent instructional staff for resident degree-credit courses is of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. This percent is assumed to apply to all full-time equivalents as percent of total full-time and part-time staff.
- 22 Constant amount = 1960-61 to 1965-66 annual average increase in staff employed in full-time organized research.
- 23 Increase in tota¹ full-time equivalents employed over each previous year.
- 24 Constant percent = 6 percent of tota' full-time equivalents employed in previous year.
- NOTE.—Sources of data and assumptions on which projections were based are given in text footnotes.

T_{ABLE} D.—Methodology (ch. IV and V)

		Projection method						
Item	Text table	Con- stant	Trend		Othe			
ttem	num- ber	S.u	Least squares equation (t = year; 1956 = 1)	Standard error				
Expenditures for education by elementary and secondary day schools.	34,35							
Current expenditures:								
Public					(1)			
Nonpublic					(²)			
Capital outlay:					(9)			
Public					(8)			
Nonpublic					(4)			
Interest:					/E'			
Public					. (⁵)			
Nonpublic					(6)			
Expenditures for education by institutions of higher	34,35							
education.								
Current expenditures: Public					. (7			
Nonpublic					-			
					•			
Capital outlay: Public					- (8			
Nonpublic					_ (s			
Current expenditures of public	36							
school systems.	00							
Average daily attendance		9 92.7						
Current expenditure allocated								
to pupil costs (excluding								
official of 1065 legislation) 10.								
Per pupil in average daily								
Total					- (*-			
Current expenditure allocated								
to pupil costs (including								
effects of 1965 legislation) 10: Per pupil in average daily					_ (17			
					- (
attendance. Tetal					(1			
Current expenditures for all		18 103 O			·			
		100.0						
programs (excluding effects of 1965 legislation) 10:								
Ct rent expenditures for all		16 103.0			:			
programs (including effects								
of 1965 legislation) ¹⁰ :								
Expenditures for salaries of in-	37							
structional staff in public								
elementary and secondary								
day achoola								
A we arm real or laws			$y' = \$4,878 + \$189(t)^{17}$	\$26.7	3			
Total salary	- -				(





			Projection method						
Item	Text table	Con-	Trend		Other				
2001	num- ber		 "	Standard error					
Construction of public elementary	38								
and secondary school class- rooms and capital outlay.									
Capital outlay (school year):			$y' = 69,897 - 68(t)^{-19}$	3,361					
Total					(20)				
Per room	200	"\$54,000 .							
Construction of public elementary	39	•							
and secondary school class-									
rooms and capital outlay by reason for construction.									
Number of classrooms:									
For increased enrollment.				·	(23)				
Elementary		28 27 . 4			·				
Secondary		²⁴ 27.5							
For current replacement					. (25)				
Capital outlay:					` ,				
For increased enrollment					_ (26)				
For current replacement					4				
Expenditures for interest by pub-	40		$y' = $293 + $57(t)^{28}$	\$19.71					
lic elementary and secondary									
schools.									
Expenditures from current funds	41,42								
and total current expendi-	•								
tures by institutions of higher education.									
Expenditures for educational									
and general purposes:									
Student education:									
Fublic			y' = \$1.207.05 +	\$15.67					
1 donc		,	$\$17.55(t)^{29}$	V -0101					
Nonpublic				\$27.30					
Nonpublication			$\$67.35(t)^{20}$	******					
Organized research:			V 01.100(1)						
Public			y' = \$339.011.05 +	\$24,700					
2 40.101			$\$91.321.05(t)^{-31}$	- ,					
Nonpublic			y' = \$235, 291.35 +	\$46,800					
F			$$121,606.85(t)^{-32}$	·					
Related activities:			•						
Public			$y' = 9.855 - 0.025(t)^{23}$	0.079					
Nonpublic			$y' = 8.712 - 0.022(t)^{34}$	0.127					
Expenditures for auxiliary en	1 -								
terprises:									
Public			$y' = 26.367 - 0.147(t)^{-38}$	0.546	}				
Nonpublic			$y' = 33.254 - 0.206(t)^{-36}$	0.328	3				
Expenditures for student aid:									
D. l. 11.			$y' = 2.834 + 0.119(t)^{37}$		3				
Public			$u' = 7.573 + 0.288(t)^{-38}$	0.173	}				
Nonpublic			- 3						
Nonpublic Capital outlay from curre			,						
Nonpublic Capital outlay from curre	nt								
Nonpublic Capital outlay from curre	nt	²⁹ 16.0							

Item	Text table	Con-	Trend		Other
1000	num- ber		Least squares equation (t = year; 1961-62 = 1)	Standard error	
Capital outlay or macitations of higher education.	43				
Public:					
Increased capacity	40 9				
Major replacement and reha- bilitation.		⁴¹ 1.0 .			• • • • •
Nonpublic:	40.0	10 074 90			
Increased capacity		13,674.30			
Major replacement and rehabilitation.		** 1.0			
Estimated average charges to full	- 44,45				
time resident degree-credi	t				
undergraduate students in					
institutions of higher educa	~				
tion.					
Tuition and required fees: 44			/ 001 0 1 0 1(4)	9 749	š
Public			y' = 231.0 + 0.1(t)))
4-year			y' = 242.0 + 9.3(t)		}
2-year			y' = 90.0 + 2.2(i)		3
Nonpublic			y' = 930.0 + 51.1(t)		}
4-year			y' = 941.0 + 30.2(i)		, 5
2-year			y = 343.0 + 48.9(i)	1.200	,
Board: 45			/ 400 F 1 0/4\	4 78	5
Public			y' = 408.5 - 1.8(6)		5 5
4-year			y' = 409.0 - 1.0(t)		7
2-year			y' = 395.0 - 3.3(t)		3
Nonpublic			y' = 517.0 - 0.4(t)		3
4-vear			$y = 320.0 - 0.3(\iota)$		7
2-year			y' = 454.0 + 5.0(t)	14.50	•
Room: 46			/ 000 E 11 E/A	1 20	3
Public			y = 239.0 + 11.0(t)		3 2
4-year			y = 241.0 + 11.9(t)		5
2-vear			y' = 101.0 + 0.4(i)		6
Nonpublic			$y = 300.0 \pm 10.00$		6
4-vear			y' = 307.0 + 11.2(i)		5
2-year			y = 230.0 + 14.0(t)	10.37	U

: See method detailed for table 36 in footnotes 9 to 16 of this table (methodology table D).

Ratio of nonpublic school teachers to public school teachers times public school current expenditures.

* See method detailed for table 38 in footnotes 19 to 21 of this table (methodology table D).

• Ratio of nonpublic school teachers to public school teachers times public school capital outlay.

• See method detailed for table 40 in footnote 28 of this table (methodology table D).

• Ratio of nonpublic school teachers to public school teachers times public school interest.

7 See method detailed for table 41 in footnotes 29 to 38 of this table (methodology table D).

• See method detailed for table 43 in footnotes 40 to 43

of this table (methodology table D).

• Constant percent = percent that a verage daily attendance in public schools was of K-12 enrollment in public schools in

1966-67.

10 The Elementary and Secondary Education Act of 1965.

If y = current expenditure allocated to pupil costs per pupil in average daily attendance.

12 Average daily attendance times per-pupil cost for each

13 Current expenditure per pupil increased by \$25 per pupil over trend expenditure.

14 Average daily attendance times per-pupil cost augmented by \$25 per pupil.

mented by \$25 per pupil.

18 Percent that expenditures for all programs were of expenditures allocated to pupil costs in 1966-67. Constant percent times total current expenditures allocated to pupil

costs (excluding effects of Act) = current expenditures for all programs (excluding effects of Act).

16 Percent that expenditures for all program, were of

expenditure allocated to pupil costs in 1956-67. Constant percent times total current expenditures allocated to pupil costs (including effects of Act) = current expenditures for all programs (including effects of Act).

- $^{17}y =$ average annual salary of tructional staff in public elementary and secondary schools.
- 18 Average annual salary times number of instructional staff in public elementary and secondary schools in each year.
 - 19 y = number of rooms completed.
- 20 Projected number or rooms completed (table 38) times constant capital outlay per room (\$54,000).
- 22 Total capital outlay in (1965-66 and 1566-67) divided by the number of rooms completed in the same period.
- divided by 1964-65 rlementary median pupil-room ratio plus secondary increase in enrollment over 5-year period divided by 1964-65 secondary median pupil-room ratio.
 - 23 1964-65 elementary median pupil-room ratio.
 - 24 1964-65 secondary median pupil-room ratio.
- 25 Total number of rooms to be completed less the number to be completed because of enrollment increases.
- ²⁶ Capital outlay per room times projected number of classrooms for increased enrollment in each 5-year period.
- Tapital outlay per room times projected number of classrooms for current replacement in each 5-year period.
- y = annual expenditure for interest in public elementary and secondary schools.
- $^{29}y = \text{expenditures for student education per full-time}$ equivalent student in publicly controlled institutions of higher education. (y times projected number of full-time equivalent students in corresponding years (table 16, column 3) = projected expenditures for student education.)
- 20 y = expenditures for student education per full-time equivalent student in nonpublicly controlled institutions of higher education. (y times projected number of full-time equivalent students in corresponding years (table 16, column 4) = projected expenditures for student education.)
- 31 y = total expenditures for organized research in publicly controlled institutions of higher education.
- $^{22}y = \text{tota'}$ expenditures for organized research in non-publicly controlled institutions of higher education.
- 23 y = expenditures for related activities as a percent of expenditures for student education in publicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for related activities.)
- $^{24}y = \text{expenditure}$ for related activities as a percent of expenditures for student education in nonpublicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for related activities.)
- $^{35}y = \text{expenditures}$ for auxiliary enterprises as a percent of expenditures for student education in publicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for auxiliary enterprises.)
 - ²⁶ y =expenditures for auxiliary enterprises as a percent

- of expenditures for student education in nonpublicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for auxiliary enterprises.)
- ny = expenditures for student aid as a percent of expenditures for student education in publicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for student aid.)
- **y = expenditures for student aid as a percent of expenditures for student education in nonpublicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for student aid.)
- ¹⁹ Constant percent = 1956-57 to 1966-67 average capital outlay from current funds as percent of capital outlay from all sources. (Projected annual capital outlay from all sources (table 43) times constant percent = projected capital outlay from current funds.)
- 40 Constant dollars = 1956-57 to 1966-67 average capital outlay by publicly controlled institutions divided by average increase in number of full-time equivalent students in these institutions. (Constant dollars times annual increase in projected full-time equivalent students = projected capital outlay for increased capacity. Result smoothed by moving average.)
- 41 Constant percent = estimated percent of value of plant replaced or rehabilitated each year. (Constant percent times projected value of plant in publicly controlled institutions in each year = projected capital outlay for replacement and rehabilitation.)
- ¹² Constant dollars = 1956-57 to 1966-67 average capital outlay by nonpublicly controlled institutions divided by average increase in number of full-time equivalent students in these institutions. (Constant dollars times annual increase in projected full-time equivalent students = projected capital outlay for increased capacity. Result smoothed by moving average.)
- ⁴² Constant percent = estimated percent of value of plant replaced or rehabilitated each year. (Constant percent times projected value of plant in nonpublicly controlled institutions in each year = projected capital outlay for replacement and rehabilitation.)
- "y = average charge for tuition and required fees per full-time degree-credit student, calculated separately for each category by type and control or institution.
- 45 y = average charge for board per full-time degree-credit student, calculated separately for each category by type and control of institution with t = 6 held constant to 1976-77.
- ^{46}y = average charge for room per full-time degree-credit student, calculated separately for each category by type and control of institution.

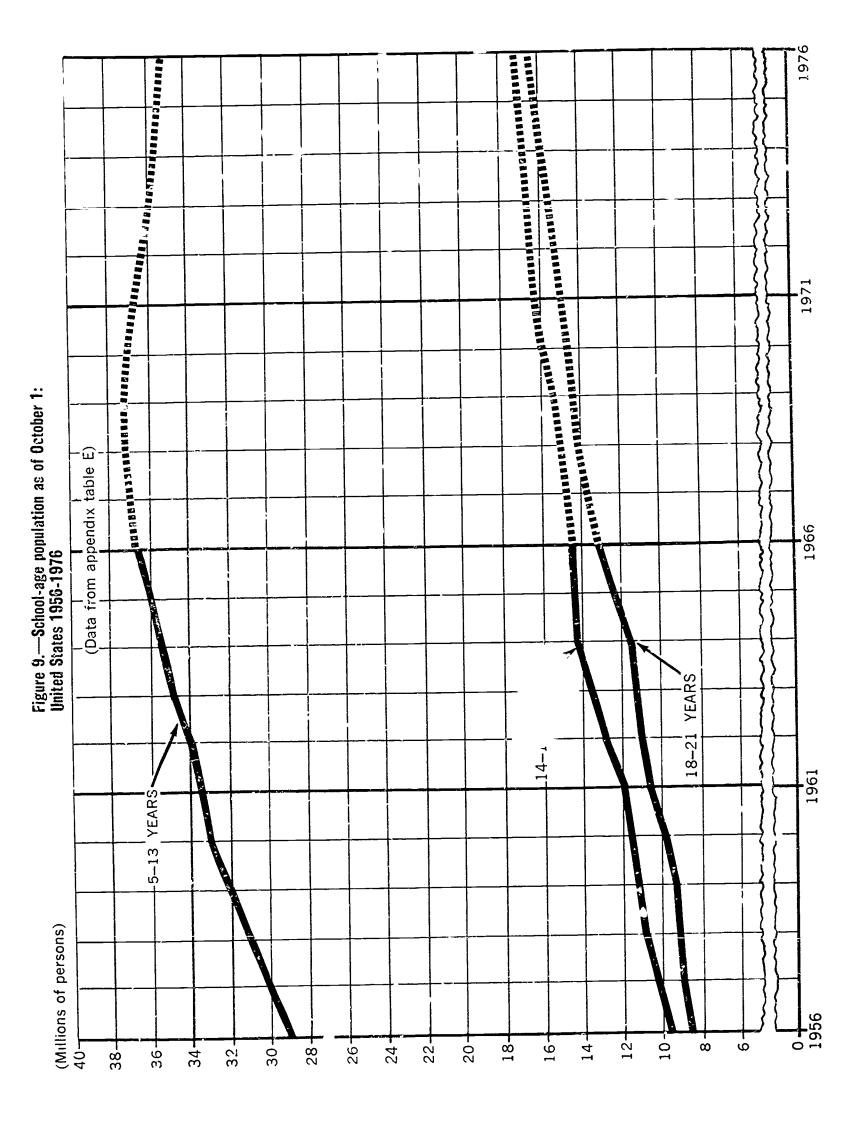


Table E.—School-age population: United States, 1956–1985 1
Projection Series C 2

			Ages as	of October	1 (in thou	ısands)		
	5-13	14-17	1	7	1	8	18-	-21
Year (fall) (1)	Total (2)	Total (3)	Men (4)	Women (5)	Men (6)	Women (7)	Men (3)	Women (9)
		EST	IMATEI)				
1956	29,115	9,788	1,146	1,127	1,136	1,116	4,344	4,322
1957	29,916	10,423	1,172	1,154	1,152	1,130	4,409	4,38
1958	30,932	10,867	1,240	1,218	1,180	1,158	4,508	4,471
1959		11,135	1,351	1,322	1,251	1,224	4,668	4,612
1960		11,411	1,462	1,428	1,360	1,329	4,897	4,82
1961		12,199	1,401	1,368	1,464	1,433	5,234	5,148
1962		12,951	1,406	1,370	1,404	1,372	5,480	5,377
4963		13,693	1,524	1,484	1,409	1,374	5,652	5,543
1964		14,215	1,869	1,812	1,526	1,488	5,817	5,702
1965		14,157	1,790	1,732	1,871	1,815	6,221	6,078
1966_ ,	36,619	14,371	1,786	1,732	1,793	1,737	6,612	6,447
		PRO	JECTED)				
			JECTED)				
1967		14,715	1,792	í,734	1,789	1,736	6,993	6,810
1968	37,224	14,715 15,135	1,792 1,843	1,734 1,785	1,794	1,739	7,259	7,062
1968 1969	37,224	14,715 15,135 15,538	1,792 1,843 1,898	1,734 1,785 1,838	1,794 1,845	1,739 1,790	7,259 7,234	7,062 7,036
1968 1969 1970	37,224 37,286 37,108	14,715 15,135 15,538 15,882	1,792 1,843 1,898 1,959	1,734 1,785 1,838 1,903	1,794 1,845 1,900	1,739 1,790 1,842	7,259 7,234 7,341	7,062 7,036 7,140
1968 1969 1970 1971	37,224 37,286 37,108 36,691	14,715 15,135 15,538 15,882 16,187	1,792 1,843 1,898 1,959 2,002	1,734 1,785 1,838 1,903 1,945	1,794 1,845 1,900 1,961	1,739 1,790 1,842 1,908	7,259 7,234 7,341 7,513	7,062 7,036 7,140 7,314
1968	37,224 37,286 37,108 36,691 36,246	14,715 15,135 15,538 15,882 16,187 16,427	1,792 1,843 1,898 1,959 2,002 2,048	1,734 1,785 1,838 1,903 1,945 1,983	1,794 1,845 1,900 1,961 2,004	1,739 1,790 1,842 1,908 1,949	7,259 7,234 7,341 7,513 7,722	7,062 7,036 7,140 7,314 7,524
1968	37,224 37,286 37,108 36,691 36,246 35,876	14,715 15,135 15,538 15,882 16,187 16,427 16,599	1,792 1,843 1,898 1,959 2,002 2,048 2,070	1,734 1,785 1,838 1,903 1,945 1,983 2,008	1,794 1,845 1,900 1,961 2,004 2,050	1,739 1,790 1,842 1,908 1,949 1,988	7,259 7,234 7,341 7,513 7,722 7,927	7,062 7,036 7,140 7,314 7,524 7,72
1968	37,224 37,286 37,108 36,691 36,246 35,876 35,563	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052	1,794 1,845 1,900 1,961 2,004 2,050 2,072	1,739 1,790 1,842 1,908 1,949 1,988 2,013	7,259 7,234 7,341 7,513 7,722 7,927 8,098	7,062 7,036 7,140 7,314 7,524 7,72 7,890
1968 1969 1970 1971 1972 1973	37,224 37,286 37,108 36,69! 36,246 35,876 35,563 35,563	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754 16,908	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114 2,124	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052 2,062	1,794 1,845 1,900 1,961 2,004 2,050 2,072 2,116	1,739 1,790 1,842 1,908 1,949 1,988 2,013 2,057	7,259 7,234 7,341 7,513 7,722 7,927 8,098 8,252	7,062 7,036 7,140 7,314 7,524 7,72 7,890 8,041
1968 1969 1970 1971 1972 1973 1974 1975	37,224 37,286 37,108 36,692 36,246 35,876 35,563 35,267 35,158	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754 16,908 16,957	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114 2,124 2,130	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052 2,062 2,062 2,071	1,794 1,845 1,900 1,961 2,004 2,050 2,072 2,116 2,126	1,739 1,790 1,842 1,908 1,949 1,988 2,013 2,057 2,066	7,259 7,234 7,341 7,513 7,722 7,927 8,098 8,252 8,375	7,062 7,036 7,140 7,314 7,524 7,72 7,890 8,041 8,158
1968 1969 1970 1971 1972 1973 1974 1975 1976	37,224 37,286 37,108 36,691 36,246 35,876 35,563 35,563 35,267 35,158 35,220	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754 16,908 16,957 16,932	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114 2,124 2,130 2,153	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052 2,062 2,071 2,085	1,794 1,845 1,900 1,961 2,004 2,050 2,072 2,116 2,126 2,132	1,739 1,790 1,842 1,908 1,949 1,988 2,013 2,057 2,066 2,075	7,259 7,234 7,341 7,513 7,722 7,927 8,098 8,252 8,375 8,457	7,062 7,036 7,140 7,314 7,524 7,72 7,890 8,041 8,158 8,244
1968	37,224 37,286 37,108 36,691 36,246 35,876 35,563 35,267 35,158 35,220 35,479	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754 16,908 16,957 16,932 16,788	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114 2,124 2,130 2,153 2,200	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052 2,062 2,071 2,085 2,118	1,794 1,845 1,900 1,961 2,004 2,050 2,072 2,116 2,126 2,132 2,154	1,739 1,790 1,842 1,908 1,949 1,988 2,013 2,057 2,066 2,075 2,089	7,259 7,234 7,341 7,513 7,722 7,927 8,098 8,252 8,375 8,457 3,540	7,062 7,036 7,140 7,314 7,524 7,72 7,890 8,041 8,158 8,248 8,321
1968 1969 1970 1971 1972 1973 1974 1975 1976 1977	37,224 37,286 37,108 36,69! 36,246 35,876 35,563 35,267 35,158 35,220 35,479 36,054	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754 16,908 16,957 16,932 16,788 16,788	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114 2,124 2,130 2,153 2,200 2,158	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052 2,062 2,071 2,085 2,118 2,078	1,794 1,845 1,900 1,961 2,004 2,050 2,072 2,116 2,126 2,132 2,154 2,202	1,739 1,790 1,842 1,908 1,949 1,988 2,013 2,057 2,066 2,075 2,089 2,123	7,259 7,234 7,341 7,513 7,722 7,927 8,098 8,252 8,375 8,457 3,540 8,624	7,062 7,036 7,140 7,314 7,524 7,72 7,890 8,041 8,158 8,245 8,321 8,321
1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1968	37,224 37,286 37,108 36,691 36,246 35,876 35,563 35,267 35,158 35,220 35,479 36,054 36,908	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754 16,908 16,957 16,932 16,788 16,371 15,885	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114 2,124 2,130 2,153 2,200 2,158 2,127	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052 2,062 2,071 2,085 2,118 2,078 2,047	1,794 1,845 1,900 1,961 2,004 2,050 2,072 2,116 2,126 2,132 2,154 2,202 2,160	1,739 1,790 1,842 1,908 1,949 1,988 2,013 2,057 2,066 2,075 2,089 2,123 2,082	7,259 7,234 7,341 7,513 7,722 7,927 8,098 8,252 8,375 8,457 3,540 8,624 8,658	7,062 7,036 7,140 7,314 7,524 7,72 7,890 8,041 8,158 8,245 8,321 8,387 8,403
1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1968 1979	37,224 37,286 37,108 36,691 36,246 35,876 35,563 35,267 35,158 35,220 35,479 36,054 36,908 37,972	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754 16,908 16,957 16,932 16,788 16,371 15,885 16,347	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114 2,124 2,130 2,153 2,200 2,158 2,127 2,129	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052 2,062 2,071 2,085 2,118 2,078 2,047 2,008	1,794 1,845 1,900 1,961 2,004 2,050 2,072 2,116 2,126 2,132 2,154 2,202 2,160 2,162	1,739 1,790 1,842 1,908 1,949 1,988 2,013 2,057 2,066 2,075 2,089 2,123 2,082 2,052	7,259 7,234 7,341 7,513 7,722 7,927 8,098 8,252 8,375 8,457 3,540 8,658 8,658 8,664	7,062 7,036 7,140 7,314 7,524 7,72 7,890 8,041 8,158 8,24 8,321 8,382 8,383 8,403 8,386
1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1968 1979 1980 1981	37,224 37,286 37,108 36,691 36,246 35,876 35,563 35,267 35,158 35,220 35,479 36,054 36,908 37,972 38,921	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754 16,908 16,957 16,932 16,788 16,347 15,885 16,347 15,193	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114 2,124 2,130 2,153 2,200 2,158 2,127 2,129 1,988	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052 2,062 2,071 2,085 2,118 2,078 2,047 2,047 2,008 1,914	1,794 1,845 1,900 1,961 2,004 2,050 2,072 2,116 2,126 2,132 2,154 2,202 2,160 2,162 2,088	1,739 1,790 1,842 1,908 1,949 1,988 2,013 2,057 2,066 2,075 2,089 2,123 2,082 2,052 2,012	7,259 7,234 7,341 7,513 7,722 7,927 8,098 8,252 8,375 8,457 3,540 8,624 8,658 8,664 8,587	7,062 7,036 7,140 7,314 7,524 7,72 7,890 8,041 8,158 8,245 8,321 8,387 8,403 8,380 8,380
1968 1969 1970 1971 1972 1973	37,224 37,286 37,108 36,69! 36,246 35,876 35,563 35,267 35,158 35,220 35,479 36,054 36,908 37,972 38,921 39,978	14,715 15,135 15,538 15,882 16,187 16,427 16,599 16,754 16,908 16,957 16,932 16,788 16,371 15,885 16,347	1,792 1,843 1,898 1,959 2,002 2,048 2,070 2,114 2,124 2,130 2,153 2,200 2,158 2,127 2,129	1,734 1,785 1,838 1,903 1,945 1,983 2,008 2,052 2,062 2,071 2,085 2,118 2,078 2,047 2,008	1,794 1,845 1,900 1,961 2,004 2,050 2,072 2,116 2,126 2,132 2,154 2,202 2,160 2,162	1,739 1,790 1,842 1,908 1,949 1,988 2,013 2,057 2,066 2,075 2,089 2,123 2,082 2,052	7,259 7,234 7,341 7,513 7,722 7,927 8,098 8,252 8,375 8,457 3,540 8,658 8,658 8,664	6,810 7,062 7,036 7,140 7,314 7,524 7,723 7,890 8,041 8,158 8,245 8,321 8,387 8,403 8,380 8,301 8,098 7,860

Office of Education estimates are based on published and unpublished Bureau of the Census population data by age as of July 1. Population data used are consistent with series C advant projection data in U.S. Department of Commerce, Bureau of the Census, 'Current Population Reports: Projections of the Population of the United States, by age, sex, and

color to 1990, with Extensions of Total Population to 2015", Series P-25, No. 359, February 20, 1967.

² The series C population projection assumes that the calendar-year fertility rate of 1966 will prevail throughout the projection period.

Table F.—School-age population: United States, 1956-1985 1
Projection Series B 2

			Ages as	of Octobe:	1 (in thou	sanda)		
	5-13	14-17	1	7	1:	8	18-21	
Year (fall) (1)	Total (2)	Total (3)	Men (4)	Women (5)	Men (6)	Women (7)	Men (8)	Women (9)
		EST	MATEI)				
956	29,115	9,788	1,146	1,127	1,136	1,116	4,344	4,32
957		10,423	1,172	1,154	1,152	1,130	4,409	4,38
958	30,932	10,867	1,240	1,218	1,180	1,158	4,508	4,47
959		11,132	1,351	1,322	1,251	1,224	4,668	4,61
960		11,411	1,462	1,428	1,360	1,329	4,897	4,82
961	33,461	12,199	1,401	1,368	1,464	1,433	5,234	5,14
962		12,951	1,406	1,370	1,404	1,372	5,480	5,37
963		13,693	1,524	1,484	1,409	1,374	5,652	5 , 5 4
964		14,215	1,869	1,812	1,526	1,488	5,817	5,70
1965	36,035	14,157	1,790	1,732	1,871	1,815	6,221	6,0
966		14,371	1,786	1,732	1,793	1,737	6,612	6,44
1967		14,715	1,792	1,734	1,789	1,736	6,993	6,8
.968	37,224	15,135	1,843	1,785	1,794	1,739	7,259	7,0
.969		1 5 ,538	1,898	1,838	1,845	1,790	7,234	7,0
.970		15,882	1,959	1,903	1,900	1,842	7,341	7,1 $7,3$
971		16,187	2,002	1,945	1,961	1,908	7,513 7,722	7,5
972		16,427	2,048	1,983	2,004	1,949 1,988	7,927	7,7
973	36,428	16,599	2,070	2,008	$2,050 \\ 2,072$	2,013	8,098	7,8
1974	26,502	16,754	2,114	$\substack{2,052\\2,062}$	2,116	2,013 $2,057$	8,252	8,0
1975		16,908 16,957	2,124 $2,130$	2,002 $2,071$	2,116	2,066	8,375	8,1
1976		16,932	2,150 $2,153$	2,085	2,132	2,075	8,457	8,2
977		16,789	2,100	2,118	2,152	2,089	8, 5 40	8,3
978		16,370	2,158	2,078	2,202	2,123	8,624	8,3
1979 1980		15,929	2,127	2,047	2,160	2,082	8,658	8,4
1700		-	2,086	2,008	2,129	2,052	8,655	8,3
	47 012			-,000	-,	_,	-,	
1981		15,707 15,744			2,088	2,012	8,587	8,3
1981	44,399	15,744	1,988	1,914	2,088 1,990	2,012 $1,918$	8,587 8,377	8,3 8,0
1981	44,399 45,802	•			2,088 1,990 1,936	2,012 1,918 1,866	8,587 8,377 8,154	-

Office of Education estimates are based on published and unpublished population data by age as of July 1. Population data used are consistent with series B advance projection data in U.S. Department of Commerce, Bureau of the Census, "Current Population Reports: Projections of the Population of the United States, by Age, Sex, and Color to 1990, with

Extensions of Total Population to 2015," Series F-25, No. 359, February 20, 1967.



² The series B population projection assumes that the average calendar-year fertility rate of 1964 and 1965 will prevail throughout the projection period.

Table G.—Fall enrollment in grades K-8 and 9-12 of regular day scnools, by control: United States, 1956-1976 12

Series B Population Projection

[In thousands]

77 (6.11)	Total p	ublic and r	onpublie		Publie		Nonpublic (estimated)		
Year (fall)	K-12	K-8	9-12	K-12	K-8 3	9-12 3	K-12	K-8	9-12
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1956		28,541	8,078	31,719	24,541	7,178	4,900	4,000	90
1957	•	29,430	8,621	32,951	25,230	7,721	5,100	4,200	90
1958	•	30,404	9,077	34,081	26,004	8,077	5,400	4,400	1,00
1959		31,511	9,271	35,182	26,911	8,271	5,600	4,600	1,00
1960		32,492	9,689	36, 2 81	27,692	8,589	5,900	4,800	1,10
1961		32,995	10,469	37,464	28,095	9,369	6,000	4,900	1,10
962		33,737	11,312	38,749	28,637	10,112	6,300	5,100	1,20
1963		34,504	12,183	40,187	29,304	10,883	6,500	5,200	1,30
1964		35,325	12,691	41,416	30,025	11,391	6,600	5,300	1,30
965		,863	12,910	42,173	30,563	11,610	6,600	5,300	1,30
1966 4	- 49,555	ან, 357	13,198	43,055	31,157	11,898	6,500	5,200	1,300
			PRO	JECTED) 5				

$\begin{array}{cccccccccccccccccccccccccccccccccccc$									
1974	1968	37,200 37,300 37,100 36,900 36,600	14,100 14,500 15,000 15,500 15,800	44,700 45,300 45,700 45,800 46,000	32,000 32,200 32,100 31,900 31,700	12,700 13,100 13,500 14,000 14,300	6,600 6,500 6,500 6,500 6,400	5,200 5,100 5,000 5,000 4,900	1,400 1,400 1,500 3,500 1,500
-, -, -, -, -, -, -, -, -, -, -, -, -, -	1973	36,500 36,500 36,700	16,100 16,300 16,600	46,200 46,500 46,800	31,600 31,600 31,800	14,600 14,800 15,100	6,400 6,400 6,400	4,900 4,900	1,500 1,500

J SOURCES:Enrollment data and estimates are based on U.S. Department of realth, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools" fall 1964 through 1968; (2) "Enrollment, Teachers, and Schoolhousing," 1955 through 1963; (3) "Statistics of State School Systems," biennially, 1957-58 through 1961-62; (4) "Statistics of State School Systems. Biennial Survey of Education in the United States," ch. 2, 1954-56; (5) "Nonpublic School Enrollment in Grades 9-12, Fall 1964, and Graduates, 1963-64"; and (6) "Statistics of Nonpublic Elementary Schools, 1961-62."

The population projections as of October 1, on which these enrollment projections are based (appendix table F), are consistent with Series B population projections in U.S. Department of Commerce, Bureau of the Census, "Current Population Reports," Series P-25, No. 359, February 20, 1967. The series B population projection assumes that the average of the 1964 and 1965 fertility rates will prevail throughout the projection period.

These encollments are included for comparison with earlier projections because the 1966 projections (Circular OE-10030-66) were based on Series B. The enrollment projections (tables 1 through 3) on which other projections in this circular (OE-10030-67) are based have as their base population Series C (appendix table E).

2 Does not include residential schools for exceptional

children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations.

Fall enrollment in public schools not reported by grade prior to 1962; grade breakdown for years 1956 through 1961 estimated from school year enrollment.

4 Preliminary data.

The projection of regular fall enrollment in day schools is based on the assumptions: (1) Enrollment rates of the 5-, 6-, and 7-year-old sopulation in public grades, kindergarten, 1, and 2 will follow the 1956-66 trends; (2) grade-tograde retention rates of public grades 6 through 3, 8 to 7, and 12 through 10, will follow the 1956-66 trends with the restriction that they cannot exceed 100 percent, (3) the retention rate of public grade 7 to 6 will remain constant at 103 percent through 1976; (4) the retention rate of public grade 9 to 8 will remain constant at 104 percent through 1976; (5) the number of enrollments in grades K-8 in non-public schools will decrease to the year 1972 and then remain constant through 1976; and (6) the number of enrollments in grades 9-12 in nonpublic schools will increase to the year 1972 and then remain constant through 1976.

For further methodology details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

Table H.—Total opening fall degree-credit resident and extension enrollment in all institutions of higher education, by sex: United States and outlying areas, 1956 to 1976 1

••	Total fall	Total fall enrollment			Total fall enrollment			
Year (fall) (1)	Total (2)	Men (3)	Women (4)	Year (fall)	Total	Men (3)	Women (4)	
1957	4,987,867	1,927,863 2,003,424 2,110,426 2,173,797 2,270,640 2,423,987 2,603,072 2,789,527 3,051,761	1,019,122 1,064,993 1,148,130 1,228,530 1,339,367 1,467,243 1,603,600 1,738,989 1,936,106	1968 1969 1970 1971 1972	6,552,000 6,958,000 7,096,000 7,356,000 7,690,000 8,070,000 8,450,000	3,932,000 4,146,000 4,200,000 4,330,000 4,501,000 4,694,000 4,892,000 5,073,000	2,621,000 2,812,000 2,895,000 3,027,000 3,189,000 3,375,000 3,558,000 3,741,000	
1964 1965 1966 ²	5,570,271	3,051,761 3,396,574 3,598,000	1,936,106 2,173,697 2,393,000	1974 1975	8,450,000 8,814,000 9,165,000 9,478,000	5,073,000 5,245,000 5,401,000		

1 SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1956 through 1966; and (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1955 through 1961.

Population on which projections are based is shown in appendix table E.

² Estimate based on fall 1966 survey of total degree-credit and nondegree-credit enrollment not reported separately, and on fall 1965 survey of total degree-credit enrollment and total nondegree-credit enrollment reported separately.

The projection of total opening fall degree-credit enroll-

ment in all institutions of higher education by sex is based on the assumption that attendance rates of men a. i women aged 18-21 years will follow the 1956-66 trend to 1976.

The projections include in each year, in addition to the number of enrollments based on the 1956-66 trend, an estimated 66,000 veterans enabled to attend college through aid provided by the Veterans' Readjustment Benefits Act of 1966. Veterans who would have attended without this assistance are assumed to be included in the trend projections. For further methodology details, see appendix table A.

NOTE.—Data include United States and outlying areas for all years. Because of rounding, detail may not add to totals.



Table I.—Earned degrees, by level and sex: United States and outlying areas, 1956-57 to 1976-77 1

Year (1)	Bachelor's and 1st-professional degrees 2				xcept 1st-pr decrees *	Doctor's (except 1st- professional) degrees			
	Total (2)	Men (3)	Women (4)	Total (5)	Men (6)	Women (7)	Total (8)	Men (9)	Women (10)
1956-57	340,347	222,738	117,609	61,955	41,332	20,623	8,756	7,817	939
1957-58	365,748	242,948	122,800	65,614	44,252	21,362	8,942	7,978	964
1958-59	385,151	254,868	130,283	69,584	47,408	22,176	9,360	8,371	989
1959-60	394,889	255,504	139,385	74,497	50,937	23,560	9,829	8,801	1,028
1960-61	401,784	255,900	145,884	78,269	54,158	24,111	10,575	9,463	1,112
1961-62	420,485	262,015	153,470	84,889	58,705	26,184	11,622	10,377	1,245
1962-63	450,592	274,750	175,842	91,418	62,944	28,474	12,822	11,448	1,374
1963-64	502,104	299,813	202,291	101,122	69,012	32,110	14,490	12,955	1,535
196465	538,930	319,670	219,260	112,195	76,211	35,984	16,467	14,692	1,775
1965-66 5	540,000	318,000	222,000	126,200	86,100	40,100	17,500	15,600	1,900
1966-67 5	574,000	337,000	237,000	132,960	90,900	42,000	18,800	16,800	2,000

PROJECTED

1 SOURCES: Degree data from U.S. Department of Health, Education, and Welfare, Office of Education publications on "Earned Degrees Conferred by Institutions of Higher Education" (1955-56 through 1963-64, and unpublished data for 1964-65).

2 1st-professional degrees include: (1) Bachelor's degrees requiring 5 or more years of work; (2) master's degrees in professional fields which have not been preceded by a professional degree in the same field; and (3) doctor's degrees in certain fields which have not been preceded by professional degrees in the same field, such as doctor of jurisprudence, doctor of medicine, doctor of dental surgery, and doctor of veterinary medicine. The number of 1st-professional degrees was reported for the academic year 1964-65 as 45,946 or about 8.5 percent of total bachelor's and 1st-professional Jegrees.

* Master's degrees include: (1) Master's degrees preceded by the 4-year bachelor's degree; (2) 2d-professional degrees

preceded by the 5 or more year 1st-professional degree; and (3) professional degrees beyond the 2d-professional degree but below the level c the doctorate, such as education

4 Doctor's degrees include: (1) The Ph.D. in any field; and (2) such degrees as doctor of education, doctor of juridical science, doctor of public health (preceded by professional degree in medicine or sanitary engineering).

⁵ Estimated.

The projection of earned degrees is based on the assumption that the percentage of degrees so population for each level and sex will continue the 1955-56 to 1964-65 trends. (Age of the population at the time of graduation for the 1st level was assumed to be 22 years; for the 2d level, 24 years; for the doctorate level, 27 years.)

For methodology details, see appendix table B.

NOTE.—Data include United States and outlying areas for all years. Because of rounding, detail may not add to

Table J.—Classification of degrees by field of study

[Individual fields listed in 1964-65 report of bachelor's and higher degrees conferred]

I. Natural sciences and related professions	Pharmacology (excluding phar-
Mathematics 1	macy) Biological sciences, other field ²
Mathematics	Biological sciences, fields not
Statistics	identified ²
Computer science and systems analy-	Agriculture and forestry ¹
sis ²	Animal science
Computer science	Animal, dairy, and poultry
Systems analysis Computer science and systems	science
analysis, other fields	Other agriculture
Computer science and systems	Agriculture, general
analysis, field not identified	Agriculture business 2
Engineering ¹	Agronomy, field crops
Physical sciences ⁸	Farm management (excluding
Astronomy	agricultural economics)
Chemistry	Fish and game, or wild life
Chemistry	management
Pharmaceutical chemistry	Food science
	Horticulture (fruit and vegetable
Earth sciences	production)
Geology	International agriculture *
Geophysics (including seismology)	Ornamental horticulture
Oceanography	Soil science
Earth sciences, other fields ²	Agriculture, other fields 2
Meteorology	Agriculture, field not identified 2
Physics	Agricultural education
Other physical sciences	Forestry
Physical sciences, general	Health professions 1
Metallurgy (excluding metallur-	Dentistry, D.D.S. and D.M.D. only Medicine, M.D. only
gical engineering)	Nursing and/or public health nursing
Physical sciences, other fields ²	Optometry (excluding preprofessional
Physical sciences, field not iden- tified 2	degrees)
Biological sciences ¹	0.:Leopathy
Anatomy and histology	Pharmacy
Bacteriology, virology, mycology,	Public health
parasitology, and microbiology	Veterinary medicine, D.V.M. only
Biochemistry	Other health professions
Biology, general	Chiropody or podiatry
Botany	Dental hygiene
Botany, general	Hospital administration
Plant pathology	Medical technology
Plant physiclogy	Occupational therapy
Entomology	Physical therapy, physiotherapy
Physiclogy	Radiologic technology
Zoology, general	Clinical dental, medical, and
Other biological sciences	veterinary medical sciences (ad-
Premedical, predental, and pre-	vanced degrees only)
veterinary sciences	Health professions, other fields Health professions, field no
Biophysics	Health professions, field not identified
Cytology	Science, general program (without major
Ecology Embryology	field) 1
Embryology Genetics	II. Social sciences, humanities, and related
Nutrition	professions
Optometry (preprofessional de-	Fine arts
gree)	Architecture
Pathology (excluding plant pa-	Music
thology)	Music education
See fratnoise at end of table.	



TABLE J.—Classification of degrees by field of study—Continued

Music including sacred music Psychology, other fields 2 Speech and dramatics arts Psychology, field not identified 2 Speech and hearing Social sciences 1 Speech and dramatic arts Anthropology Other fine and applied arts Economics Art education Agricultural economics Art, general Economics Fine and applied arts, other Geography fields History Fine and applied arts, field not Arterican civilization, American identified culture Philosophy and religion 1 History Philosophy International relations Scholastic philosophy Political science or government Religious education and Bible Public administration Other religious fields Sociology Religion, liberal arts curriculum, Other social sciences Social sciences, general nonsectarian Religion, other fields Area studies, regional studies Religion, field not identified Foreign service programs (con-English and journalism 1 sular and diplomatic service) English Industrial relations Journalism Basic social sciences, other fields 2 Foreign languages Applied social sciences, other Latin and/or classical Greek fields 2 French Social sciences, field not identi-German fied 2 Russian and other Slavic languages Education 1 Rusein Physical education Other Slavic languages Physical education (including non-Spanish teaching 2) Other languages and language pro-Health education Recreation education Linguistics (including phonetics Industrial arts and semantics) Industrial arts education (non-Italian vocational) Portuguese Trade and industrial education Philology and literature of ro-(vocational) mance languages Other specialized teaching fields Other Germanic languages Education of exceptional chil-Philology and literature of Gerdren manic languages Education of the partially Arabic sighted 2 Chinese Education of the blind 2 Hebrew Education of the mentally Hindi and/or Urdu retarded Japanese Education of the emotion-Foreign languages, other fields 2 ally disturbed 2 Foreign languages, field not identi-Education of the deaf 2 fied 2 Education of the crippled 2 Te ching English as a foreign Education of exceptional language children, all other 2 Psychology 1 Specialized teaching fields, other fields² General psychology² General teaching fields Clinical psychology Nursing and/or kindergarten edu-Counseling psychology ² cation Social psychology Early childhood education Rehabilitation counselor training 2 4 Elementary education Educational psychology 2 5 Secondary education (including junior high school) See footnotes at end of table.

Table J.—Classification of degrees by field of study—Continued

Education—Continued General teaching fields-Continued Combined elementary and secondary education Adult education General teaching fields, other fields 2 Other education fields Educational administration, supervision, or finance 2 Counseling and guidance Rehabilitation counselor training² History, philosophy, and theory of education, and comparative education 2 Curriculum and instruction 2 Education, general Preprofessional bachelor's degrees Other education fields 2 Education, field not identified 2 Library science Social work, social administration, social welfare Other 1 Business and commerce Accounting Other business and commerce Hotel and restaurant administration Secretarial studies Business and commerce, general Business and commerce, other fields? Business and commerce, field not identified 2 Projected in tab' , 20, 21, and 22.

II. Social sciences-Continued

Business education, commercial education Distributive education, retail selling Home economics Home economics education Home economics, general Child development, family relations Clothing and textiles Foods and nutrition Institution management, institutional administration Home economics, other fields Home economics, field not identified? Law (L.L.B., J.D., or higher degrees) Military, naval, or air force science Merchant marine (deck officer only) naval, or air force Military, science Theology Theology (1st-professional degree) Theology (master's and doctor's degrees) Miscellaneous and unclassified fields Trade and industrial training Arts, general program (without major field) Arts and sciences, general program

Interarea and interfields of study 2

Fields of study not listed 2

Field of study not identified 2

Added and/or revised item, 1964-65 report.

Total of detailed listing by field in 1964-65 report.

See siso education.

Includes similar listing from education, 1964-65 report.

July June	Consumer price index 1	Construction cost index 3	July-June	Consumer price index 1	Construction cost index 3
1956-57		75.282	1962-63		86.769
1957-58		75.979	1963-64		89.339
1958–59 1959–60		78 227 80.603	1964-6 5		91.651 94.862
1960-61		82.530	1966-67	·	
1961-62	91.371	84.457			
		ESTIN	MATED *		
1967-68	101.632	102.759	1968-69	103.705	106.278

¹ The Consumer Price Index, prepared monthly by the Bureau of Labor Statistics, U.S. Department of Labor, was averaged on a July-June basis to correspond with the school year and converted to .966-67 = 100. The 1957-59 index number for 1966-67 was estimated at 114.642.

Index, published in Construction Review by the U.S. Department of Commerce, was averaged on a July-June basis to correspond with the school year an 1 converted to 1966-67 = 100. The 1957-59 = 100 index number for 1966-67 was estimated at 129.750.

² The American Appraisal Company Construction Cost

^{*} Estimate based on trend.

TABLE 25.—Estimated intel demand for classroom teachers in public elementary and secondary schools:

Intel States, 1961 to 1976*

Series C Population Projection

		Demand for additional certificated teachers						
Year (fa ^{ll})	Total teacher demand	For enrollment increase	For replace- ment of substandard	For teacher turnoves	Total			
(1)	(2)	(3)	teachers 1 (4)	(5)	(6)			
961	1,461,055	*·						
962	1,507,552	46,497	8,988	116,884	172,369			
	·	70,225	-545	120,604	190,284			
963		70,407	500	126,222	197,129			
964		62,135	-1,427	131,855	192,563			
965		77,786	6,373	136,826	208,239			
966 4		327,050	1,143	632,391	960,58			
	F ELEMENTARY	CTUAL						
1965	A 1,710,319		1,427 -6,373	131,855 136,826	192,56			
1965	1,710,319 1,788,105	62,135	1,427	131,855	192,56 208,23			
1965 1966 ⁴	1,710,319 1,788,105	62,135 77,786 COJECTED ⁵	1,427 6,373	131,855	192,56 208,23			
1965 1966	1,710,319 1,788,105 PP	62,135 77,786 0JECTED 5	1,427 6,373	131,855 136,826	192,56 208,23 198,2 196,6			
1965	1,710,319 1,788,105 PP. 1,843,000 1,892,000	62,135 77,786 OJECTED ⁵ 55,000 49,000	1,427 6,373	131,855 136,826	192,56 208,23 198,2 196,6 196,5			
1965 1966 ⁴ 1967 1968	1,710,319 1,788,105 PP 1,843,000 1,892,000 1,937,600	62,135 77,786 OJECTED 5 55,000 49,000 45,000	1,427 6,373 220 220 220	131,855 136,826 143,048 147,440 151,360	192,56 208,23 198,2 196,6 196,5 178,1			
1965	1,710,319 1,788,105 PP 1,843,000 1,892,000 1,937,600 1,960,000	62,135 77,786 0JECTED 5 55,000 49,000 45,000 23,000	1,427 6,373 220 220 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960	192,56 208,23 198,2 196,6 196,5 178,1 174,0			
1965 1966 ⁴ 1967 1968	1,710,319 1,788,105 PP 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000	62,135 77,786 0JECTED 5 55,000 49,000 45,000 23,000 17,000	1,427 6,373 220 220 220 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806	192,56 208,23 198,2 196,6 196,5 178,1 174,0 943,7			
1965. 1966 ⁴	1,710,319 1,788,105 PP 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000	62,135 77,786 0JECTED 5 55,000 49,000 45,000 23,000 17,000	220 220 220 220 220 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608	192,56 208,23 198,2 196,6 196,5 178,1 174,0 943,7 169,3			
1965	1,710,319 1,788,105 PP 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000 1,977,000	62,135 77,786 0JECTED 5 55,000 49,000 45,000 23,000 17,000 189,000	1,427 6,373 220 220 220 220 220 220 220 22	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608 158,160	192,56 208,23 198,2 196,6 196,5 178,1 174,0 943,7 169,3 166,2			
1965	1,710,319 1,788,105 PP 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000 1,977,000 1,988,000 1,995,000	62,135 77,786 0JECTED 5 55,000 49,000 45,000 23,000 17,000 189,000 7,000	-1,427 -6,373 220 220 220 220 220 3 1,100 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608 158,160 159,040 159,040	192,56 208,23 198,2 196,6 196,5 178,1 174,0 943,7 169,3 166,2 168,8			
1965. 1966 4. 1967. 1968. 1969. 1970. 1971. 1967-71. 1972. 1973. 1974.	1,710,319 1,788,105 PP 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000 1,977,000 1,988,000 1,995,000 2,004,000	62,135 77,786 0JECTED 5 55,000 49,000 23,000 17,000 189,000 11,000 7,000 9,000	220 220 220 220 220 220 220 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608 158,160 159,040 159,600 160,320	192,56 208,23 198,2 196,6 196,5 178,1 174,0 943,7 166,2 168,8 164,5			
1965	1,710,319 1,788,105 PP 1,843,000 1,892,000 1,937,600 1,960,000 1,977,000 1,988,000 1,995,000 2,004,000 2,008,000	62,135 77,786 0JECTED 5 55,000 49,000 45,000 23,000 17,000 189,000 11,000 7,000 9,000	220 220 220 220 220 220 220 220 220 220	131,855 136,826 143,048 147,440 151,360 154,960 156,806 753,608 158,160 159,040 159,600 160,320	192,56			

Table L.-Estimated receipts of regular and "other" educational institutions by level, by control, and by source: United States, 1955-56 to 1963-641

[Ir. billions of current dollars and as percents]

	Amount					Percent				
Level, control, and source (1)	1955- 56 (2)	1957- 53 (3)	1959- 60 (4)	1961- 62 (5)	1963- 64 (6)	1955- 56 (7)	1957- 58 (8)	1959- 60 (9)	1961- 62 (10)	1963- 64 (11)
All levels: Total public and										
nonpublic	\$17.0	\$21.4	\$25.3	\$5∪.3	\$36.4	100.0	100.0	100.0	100.0	100.0
Federal	1.0	1.4	1.9	2.5	3.2	5.9	6.6	7.5	8.3	5.9
State	4.9	6.3	7.5	9.0	10.9	28.8	29.4	29.5	30.0	29.9
Local	7.3	8.6	9.9	11.3	12.9	42.9	40.2	39.0	37. 3	35.7
All other	3.8	5.1	6.0	7.5	9.4	22.4	23.8	24.0	24.4	25.5
Total public	13.9	17.2	20.2	23.9	28.4	100.0	100.0	100.0	100.0	100.0
- -		1.0	1.4	1.7	2.1	5.8	6.4	6.9	7.1	7.5
Federal	.8					35.2	36.6	36.9	37. 7	38.1
State	4.9	6.3	7.5	8.9	10.8	1		48.8	47.3	45.9
Local	7.3	8.6	$9.9 \\ 1.4$	$\frac{11.3}{2.0}$	$\begin{array}{c} 12.9 \\ 2.6 \end{array}$	52.5 6.5	$50.0 \\ 7.0$	7.4	7.9	8.5
Ail other	.9	1.3	1.4	Z.U	<u> </u>	0.0	7.0 			=====
Total nonpublic	3.1	4.2	5.1	6.4	8.0	100.0	100.0	100.0	100.0	100.0
Federal	.2	.4	.5	.8	1.1	6.5	7.1	9.8	12.5	13.8
State	(2)	(²)	(2)	.1	. 1	(3)	(3)	(3)	1.6	1.2
Local	(2)	(2)	(²)	(2)	(2)	(3)	(3)	(ª)	(*)	(3)
All other		3.8	4.6	5.5	6.8	93.5	92.9	90.2	85.9	85.0
: Elementary and	=== ==							<u> </u>		
secondary:										
Total public and						ì				
nonpublic	12.8	15.7	18.5	21.4	24.8	100.0	100.0	100.0	100.0	100.0
Federal	.5	.6	.8	.9	1.0	3.9	3.9	4.3	4.2	4.0
State		4.8	5.8	6.8	8.1	29.7	30.5	31.4	31.8	32.7
Local		8.4	9.7	11.1	12.6	56.2	53.5	52.4	51.9	50 .8
All other		1.9	2.2	2.6	3.1	10.2	12.1	11.9	12.1	12.5
Total public	11.5	13.8	16.3	18.8	21.7	100.0	100.0	100.0	100.0	100.0
Federal	5	·.6	.8	.9	1.0	4.3	4.3	— — 4.9	4.8	4.6
State		4.8			8.1		34.8	35.6	36.2	37.3
Local		8.4			12.6	1		5 3.5	59.0	5 8.1
All other										
Total nonpublic	1.3	1.9	2.2	2.6	3.1	100.0	100.0	100.0	100.0	100.0
Foderal										
State						-				
LocalAll other			2.2	2.6	 2 1	100.0	100.0	100.0	100.0	100.0

See footnotes at end of table.

TABLE L.—Continued

		Amount				Percent				
Level control, and source (1)	1955 - 56 (2)	1257- 59 (3)	1959- 60 (4)	1961- 62 (5)	1963 64 (6)	1955- 56 (7)	1957- 58 (8)	1959- 60 (9)	1961- 62 (10)	1963 64 (15)
nstitutions of higher education:										
Total public and				_						
nonpublic	4.2	5.7	6.8	8.9	11.6	100.0	100.0	100.0	100.0	100
Federal	.5	.8	1.1	1.6	2.2	12.1	13.6	i6.0	18.1	19
State	1.1	1.5	1.7	2.2	2.8	26.5	26.7	24.8	24.6	23
Local	.1	.2	.2	.2	.3	3.0	3.1	2.8	2.6	2
All other	2.5	3.2	3.8	4.9	8.3	58.4	56.6	56.4	54.7	54
Total public	2.4	3.4	3.9	5.1	6.7	100.0	100.0	100.0	100.0	100
Federal	.3	.4	.6	.8	1.1	11.5	13.1	15.0	16.0	17
State	1.1	1.5	1.7	2.1	2.7	45.6	44.1	41.9	42.1	40
Local	.1	.2	.2	.2	.3	5.1	5.1	4.7	4.3	4.
All other	.9	1.3	1.4	2.0	2.6	37.8	37.7	38.4	37.6	38
Tetal nonpublic	1.8	2.3	2.9	3.8	4.9	100.0	100.0	100.C	100.0	100
Federai	.2	.4	5	.8	1.1	12.8	14.4	17.4	20.9	23
State	(²)	(²)	(2)	.1	.1	1.6	1.2	1.5		1
Local	(²)	(²)	(2)	$(^{2})$	(²)	.2	.2	. 2	.2	
All other	1.6	1.9	2.4	2.9	3.7	85.4	84.2	80.9	77.4	75

¹ Includes estimates for "other" elementary and secondary schools such as residential schools for exceptional children, Federal schools for Indians, and federally operated elementary and secondary schools. The annual receipts were estimated as follows: Public; \$100 .nillion for 1955-56, 1957-58, and 1959-60, \$200 million for 1961-62 and 1963-64; nonpublic, less than \$50 million for 1955-56, 1957-58, 1959-60, and 1961-62, and \$100 million for 1963-64.

Less than \$50 million.

Less than 0.05 percent.

NOTE.—Receipts include revenue and nonrevenue receipts, current and plant-fund receipts, proceeds of loans, less transfers of funds which would result in duplication, and less repayment of loans. All receipts and deductions concerning loans are included in "All other" sources. Deduction of transfers was made from data in "All other" sources.

Table M.—Federal Funds for Education and Related Activities: 1962 to 1966
[In millions of dollars]

Type of support, level, and program area (1)	1962 (2)	1963	1964 (4)	1965 (5)	1066 (6)
Total	\$4,730.4	\$5,305.2	95,818.1	\$7,431.2	\$10,583.5
Federal funds supporting education in educa- tional institutions 1	2,067.1	2,383.6	2,722.8	3,878.2	6,725.9
	1,745.9	1,987.1	2,323.5	3,348.7	6,113.4
Elementary-secondary education	554.4	599.8	665.8	892.2	2.410.
Assistance for educationally deprived					050
children			200 1		959.
School assistance-federally affected areas_	304.9	330.3	323.1	407.6	433.
Assistance for special groups 2	53.0	60.9	67.0	123.5	404.
National Defense Education Act (Titles	70.0	50.1	00.4	00 =	100
III and VA)	58.6	58.1	92.4	90.5	103.
Supporting services 3	4.3	4.7	5.2	6.5	173.
Public lands revenue for schools		44.6	48.6	51.5	54. 86.
Dependents' schools abroad	40.5	45.3	61.5	80.5 77.4	115.
Vocational education	26.4	26.3	24.9		68.
School assistance in special areas 4	14.8	17.7	32.6	50.2	
Teacher Corps		$6.8 \\ 3.9$	$\begin{array}{c} 3.1 \\ 4.4 \end{array}$	3.4	4.
Science education, NSF		1.2	1.0	1.1	1.
Other			1,333.7	1,901.9	
Higher education	991.9	1,161.5	1,000.1	1,901.9	2,000.
Basic research in educational institutions	384.5	455.2	551.9	634.2	730.
proper		157.9	133.5	191.7	229
Research facilities		234.6	261.2	282.4	365 ·
Training grants		143.0	181.8	196.9	254 .
Fellowships and traineeships	. 103.9	41.1	56.1	384.1	668
Institutional support-facilities 5		43.4		93.4	163
Institutional support-other 6		69. 9	62.3	100.4	
Other student assistance 7		16.4	17.4	18.8	18
Other support	. 11.7	10.4	11,7	10.0	20.
Adult vocational-technical and continuing	87.8	113.5	203.8	434.4	926
education		74.7	161.9	342.2	
Vocational-technical education		8.0	9.1	72.4	385
Assistance for special groups 2		29.0	25.1	10.3	6
Veterans educationGeneral continuing education				1.5	
Training State and local personnel	2.9			8.0	
Value of surplus property transferred 8	_	112.3	120.2	120.2	120.
value of authors property transferred					
Loans	321.2	396.5	399.3	529.5	612
Elementary-secondary education	_			.4	
Higher education				528.2	610
Student loan programs 9					234
Loans for facilities 10	245.9	305.2	287.5	369.0	375
Vocational education insured loan fund					1

See footnotes at end of table

TABLE M.—Continued

Type of support, wel, and program area (1)	1962 (2)	1963 (3)	1964 (4)	1965 (5)	1966 (6)
Other Federal funds 11	2,663.3	2,321.6	3,095.3	3,556.0	3,857.6
Applied research and development	912.3	1,042.0	1,052.9	1,103.0	1,197.9
Related school services	373.8	386.2	418.6	510.0	521.9
School lunch and milk programs.	366.9	379.3	411.7	500.5	512.2
Job placement for high school seniors	6.9	6.9	6.9	9.5	9.7
Training of Federal personnel	1,177.5	1,279.6	1,370.4	1,577.9	1,706.7
Military academies ¹³	74.0	75.7	77.4	105.1	137.2
Professional and technical training of					
military		1,172.0	1,245.0	1,399.1	1,487.9
Training in nongovernment facilities	31.5	31.9	48.0	73.7	81.6
Library services	22.2	23.9	25.3	82.9	86.3
Grants to public libraries.	6.9	7.4	7.5	54.9	55.0
National library services	15.3	16.5	17.8	28.0	31.3
International education	109.1	116.1	130.0	177.2	222.5
Educational Exchange Program	28.1	35.6	38.0	45.1	53.5
AID education projects and training	8î.0	80.5	84.6	87.8	111.8
Other international education and					
training	(13)	(13)	7.4	44.3	57.2
Other.	68.4	73.8	98.1	105.0	122.3
Extensive services	59.3	63.0	79.4	85.4	90.7
Educational television facilities			5.2	5.1	15.2
Education in Federal correctional institu-					
tions	2.1	2.5	2.9	3.5	3.6
Other education and training	7.0	8.3	10.6	11.0	12.8

SOURCE: Department of Health, Education, and Welfare, Office of Education, Digest of Educational Statistics, 1966; and budget documents.

- ¹ Excludes payments for services rendered to the Federal Government.
- 2 Includes Indian education and Economic Opportunity Act programs.
- Includes Titles III (part) and X of NDEA and Titles II, III, and V of ESEA.
- 4 Includes District of Columbia, Canal Zone, national parks and territories, Cuban refugee education, etc.
- *Includes construction at Howard University and Gallaudet College, Washington, D.C., Higher Education Facilities Act, AEC and NSF grants.
- Includes AEC, NSF, and PHS grants, language and area centers, land-grant colleges, and support of Howard Uni-

versity, Gallaudet College, East-West Center for Cultural and Technical Interchange, and State merchant marine

- 7 Includes Veterans education and work-study programs.
- * Estimated actual value of surplus real and personal property at time of transfer for education uses.
- Includes college, health professions, nursing, and Cuban refugee programs.
- 10 Includes college housing and Higher Education Facilities Act programs.
- ¹¹ Includes payments for services rendered to the Federal Government and education and related activities excluded above.
 - 12 Office of Education estimates.
 - 13 Data not available.

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